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EXHIBITING

A VIEW OF THE IMPROVEMENTS AND DISCOVERIES IN THE VARIOUS BRANCHES
OF MEDICAL SCIENCE.

EDITED BY

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AND

AN ASSOCIATION OF PHYSICIANS AND SURGEONS.

Quærere verum.---HORACE.

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VOL. I.

OBSERVATIONS

ON

FRACTURES OF THE NECK OF THE THIGH-BONE,

*From the Surgical Lecture, delivered
January 18th, 1832, by*

SAMUEL COOPER,

*Professor of Surgery in the University of
London, Surgeon to the Bloomsbury Dispensary,
King's Bench and Fleet Prisons, &c.*

GENTLEMEN,

At our last meeting, I explained the different fractures of the upper portion of the femur. We may consider two facts completely established, with respect to *transverse* fractures of the neck of the thigh-bone, *entirely within the capsular ligament*.

The first is, that they are not generally united by bone; the second is, that, in a very limited number of cases, such union is accomplished.

You will observe, gentlemen, that I lay an emphasis on the word *transverse*, because fractures, extending obliquely or longitudinally through the neck of the femur, may not be attended with any separation of the fragments, often reach beyond the external boundary of the capsular ligament, and are very well known to admit of bony union, like fractures in general.

Why the generality of transverse fractures are not united at all, or only by a ligamentous substance, and why a few examples are united by bone, are interesting points, which I should not be justified in passing over in silence. When the head of the bone is insulated from the rest of the vascular system, with the exception of its attachment to the acetabulum by means of the ligamentum teres, its supply of blood must obviously be very scanty, and, as is sometimes conceived, quite insufficient to enable it to perform its share in the work of osseous union. It receives, indeed, only such blood as finds its way into it through the vessels of the ligamentum teres.

Now, in opposition to the argument of those, who regard the cancellous structure as

inadequate, under these circumstances, to the production of bony union, it is ingeniously asked, does the formation of callus then require a greater supply of blood, than the growth of a ligamentous substance, which is the usual bond of union? Perhaps, the right answer to this question might be, that whether ligament, or bone need more vascularity and a greater supply of blood for its development, has little to do with the matter under consideration, because the ligamentous bands, forming the connecting medium in ordinary cases, are certainly not produced by the vessels of the cancellous structure of the head of the bone.

In many cases, slight attempts at ossification are made on what remains of the outer portion of the neck of the bone, and also on the great trochanter; but, it is only in a few rare examples of transverse fractures of the neck, wholly within the capsular ligament, that the inner fragment becomes united to the outer one, by osseous matter.

When such union does occur, one explanation offered of the fact, is that, it is in consequence of the slender reflection of the synovial membrane over the head and neck of the bone happening to remain entire, so that both by keeping the ends of the fracture in close apposition, and giving the head of the bone a better supply of blood, the parts are placed in a more favourable condition for long consolidation.

If, gentlemen, we adopt this view, we must then really infer, that an osseous union truly requires a more accurate coaptation of the fragment, a greater steadiness of them, and a freer supply of blood to the head of the bone, than an union by ligament. It needs, as Sir Astley Cooper was observing to me this morning, that the reflection of the synovial membrane over the neck of the bone, should take its share in the work of ossification, equally with the cancellous structure itself.

However this may be, it is an obvious fact, that the surfaces for coaptation in a transverse fracture within the capsule, are of such little extent, and one of them so unsteady,

that, unless the reflection of the synovial membrane happen to continue unbroken, it must be difficult, if not impossible, to preserve them in a state of apposition.

We have in the museum of this University a most interesting preparation, which I now shew you; an instance, in which there has been a fracture of the head of the femur, the fragments of which part are firmly united by osseous matter, though the neck remains separated. This specimen seems to prove, then, that the supply of blood to the cancellous texture of the head of the bone, through the ligamentum teres, was adequate to the production of callus, as far as the fragments of that portion of the femur was concerned. Why then did not the process of ossification extend itself, so as to join together the remaining parts of the neck? Was it because the reflection of the synovial membrane had been lacerated? And, because in the early stages of the changes, which followed the accident, there was no coaptation between the external and internal portions of the neck of the bone?

In whatever manner we may reason upon this matter, facts must remain unaffected by our particular notions concerning the manner of their production. Many cases of bony union of transverse fractures of the neck of the femur within the capsular ligament are now upon record, and their reality is confirmed by dissection and the preservation of the parts. I know of about ten examples myself. You may read some of the particulars, of not less than four, in *Amesbury's Treatise on Fractures*. It is from one of these examples that the specimen, which I now produce, was taken by my friend Mr. Langstaff, who has been so kind as to lend me the preparation and accompanying drawings. If you examine them; you will see, that though the fracture has been completely within the capsular ligament, entirely through the neck, which has been absorbed, a firm bony union has taken place. In the line of fracture, in a kind of groove, which you may observe towards its centre, there was indeed a ligamentous substance, yet the bony connexion elsewhere is perfect and solid.

Another equally satisfactory proof of bony union is exemplified in the case of Dr. James, who fractured the neck of the thigh-bone by a fall from his horse in the South of France, and was attended by Dr. Brulatour, of Bordeaux. Dr. James having died of some pulmonary complaint seven months after the accident, the surgeon, whom I have mentioned, had an opportunity of dissecting the hip-joint, and of ascertaining the state of the fractured bone. Here are drawings of it, from which you will perceive that the case was a transverse fracture entirely within the capsule, that the neck is absorbed, and that the opposite ends of the fracture are even more completely consolidated by bony matter, than in the interesting case published by

Mr. Langstaff, in the *Medical and Chirurgical Transactions*. I might quote other cases in proof of the occasional accomplishment of bony union; but these will perhaps suffice. We have no specimen of bony union of a transverse fracture of the neck of the femur entirely within the capsule in the museum of this University. All the cases are either not united at all, or united by ligamentous bands. But, we possess the curious preparation already specified, in which the fragments of the head of the bone are consolidated, though the neck itself remains ununited. In the greater number of such cases, the accident leads to the absorption of the whole, or greater part of the neck, and whatever strength the joint regains, is owing to ligamentous bands, which generally extend from the inside of the capsule to each fragment, but sometimes from one fragment to the other. In many instances, the capsular ligament is also considerably thickened.

In the specimen which I now hold up, you see a fracture of the neck of the femur, within the capsule: the head of the bone is broken off at the commencement of the neck: these were the appearances seven weeks after the accident: you may remark, that there is no attempt at union.

In another example, which I shew you, the neck of the femur was broken, the head is much diminished and displaced, and nearly the whole of the cervix absorbed.

Here we have another preparation, in which the fractured neck of the bone is united by ligament.

In another specimen upon the table, you will see a fracture of the neck of the bone, where osseous union has taken place. On looking at its posterior surface, it is clear, that the fracture extended within the capsular ligament; on looking at its forepart, this is doubtful. The head of the bone is depressed, and the limb consequently shortened. These fractures, extending beyond the limit of the synovial membrane, as I have explained commonly unite by bone. Here, however, is another preparation, in which the head of the femur is broken, and, though the fracture extends through the neck to the outside of the capsule, the uniting substance is ligamentous. But, as only three weeks had transpired from the time of the accident, when the patient, an aged female, died; it seems to me probable, that if she had lived longer, the union would have been of an osseous nature.

Gentlemen, I now request your attention to two facts of practical importance, brought before us by the foregoing views:

The first is, that we cannot always be positive about the fracture being entirely within the capsular ligament.

The second is, that the majority of cases, when they are of this kind, admit of union by ligament, and a few by bone; while all others reaching beyond the limit of the sy-

novial membrane towards the trochanter, having more or less of a longitudinal direction, generally unite by bone, as well as common fractures.

Treatment. The manifest inference is, that, our duty as surgeons should always be to aim at bringing about an union, by whatever substance it may be accomplished.

In fractures of the neck of the thigh-bone, whatever apparatus be employed in the treatment, its usefulness depends upon its keeping the limb in a certain posture, and as quiet as possible. By making pressure directly on the hip itself, whether by splints, or bandages, no good can be effected; position and quietude are the only right principles to be aimed at.

If there be much retraction, we may put up the limb in the bent posture on the double inclined plane, or employ a long splint in the manner of Desault, or Boyer, with the limb extended; or we may use Hagedorn's apparatus, the principle of which is to make the pelvis and limb of the sound side, with the aid of a long splint applied to it, a fulcrum for a foot-board, to which the broken limb is fixed, by means of a leather slipper, or sock, with the foot in the most desirable position, and the limb restored to its proper length.

Either of these methods would also be suitable for fractures of the upper part of the femur, on the outside of the capsular ligament.

My friend, Mr. Langstaff, entertains the belief, that all fractures of the neck or the bone, would terminate in bony union, if the patient were to submit to confinement and quietude long enough. A preparation, which I now show you, gentlemen, belongs to that gentleman's museum. You may observe, that, though the union is ligamentous, it is so close, as, in Mr. Langstaff's opinion, to justify the suspicion, that, if the patient had lived a little while longer, the connexion of the fragments would have assumed a bony nature, and become perfectly motionless.

Lastly, I may notice the doctrine of Sir Astley Cooper, who, if the fracture be a transverse one entirely within the capsule, and the patient advanced in years, considers it better to let the confinement of the limb be discontinued altogether at the end of two, or three weeks. His experience leads him to think, that more use of the limb will be regained in this manner with ligamentous union, than with a bony one; the attainment of which could not be calculated upon, and if accomplished, would be acquired at the expense of a very long and tedious confinement, injurious to the health, and destructive of the muscular power of the limb.

When, however, the patient is young, and one in whom we are more likely to meet with a fracture extending beyond the capsule, or more or less oblique, or longitudinal, if he keeps the limb in a state of quietude,

by means of a suitable apparatus, in the expectation that bony union will take place within a reasonable period of time. Gentlemen, in corroboration of the opinion, not uncommonly entertained, that the occasional accomplishment of bony union; in transverse fractures of the neck of the femur, entirely within the capsular ligament, depends upon the reflection of the synovial membrane happening to remain untorn, I ought to have mentioned to you a specimen of such union, shewn to me this morning by Sir Astley Cooper, where it clearly appears that the fragments were not in the slightest degree displaced.

The Professor concluded the lecture with a description of other fractures of the femur, and of fractures of the patella and leg.

PROFESSOR GREEN ON FRACTURES OF THE NECK OF THE THIGH-BONE.

Fracture of the Neck within the Capsular Ligament.

GENTLEMEN,

A question of great importance has divided the opinions of surgeons, in consequence of Sir Astley Cooper's statement, that the transverse fracture of the neck of the thigh-bone within the capsular ligament does not unite by bone. Sir Astley, you observe, does not say that ossific union in such a case is impossible—he only states that he has not seen it generally occur.

The causes to which this general failure is attributed consist, first, of the want of due apposition of the fractured extremities, for the shaft of the bone is liable, in the absence of adequate pressure, to be carried upwards by the powerful muscles which attach the bone to the pelvis, and thus the broken parts will be separated. Proper apposition is, in the second place, prevented, partly by the effusion of synovia into the capsule, whereby the ligament is distended, and partly by the imperfection of the living power which resides in the head of the bone when broken off from the neck of the femur. You are aware, that under such circumstances, the head of the bone is supplied with blood by a few small vessels only which pass along the ligamentum teres. In old subjects, according to Sir Astley Cooper, there would be a still greater deficiency of this latter power. Now, gentlemen, whatever be the causes of it, the fact is, at all events, clear, that universally, I may say, fractures of the neck of the thigh bone within the capsule, are deemed to be incapable of ossific union. Dr. Colles, of Dublin, who has paid great attention to this question, has placed on record the appearances which presented themselves in dissection, in a considerable number of fractures of the neck of the femur. Sometimes union was formed by ligamentous bands,

longer or shorter. Here is a specimen of a similar union, where you may observe the ligamentous bands to be very short, indeed, so much so, as to be capable of maintaining a permanent attachment between the broken parts. Next, Dr. Colles found instances in which the neck of the bone was absorbed without any union. He found, however, in the lower portion of the fractured bone, deposits, forming a case—and sometimes acting like a splint in supporting the neck. Thirdly, he says that the broken surfaces present patches of ivory-like deposits, that they move upon one another; and that thus, in some measure, support is maintained.

Such are the general results which have been arrived at upon this important point of practice. For my own part, I cannot help believing that bony union, in such cases as we are now considering, is perfectly possible. I saw some time ago, and minutely inspected, a specimen of bony union of the neck of a femur, sent to me by Mr. Chorley, of Leeds, and which I have no doubt was a fracture within the capsular ligament. Complete union was established, and it is only just to mention, that Mr. Chorley so considered it at the time. I have seen another specimen of the same process, and cases of the kind are mentioned as having occurred in the practice of Dr. Brucdo and of Mr. Field. In short, there can be no doubt of the possibility of bony union in fractures of the neck within the capsule, although I am ready to admit that such cases are extremely rare.

Now, gentlemen, seeing how seldom in this class of fractures, union by ossific matter takes place, you may be inclined to ask, why not give up the hope of such complete union at once, and direct all your treatment to the facilitating of that sort of union which most commonly takes place in such accidents? The answer is, that since bony union is possible, and since close ligamentous union will answer the intended purpose, it is our duty to afford the patient the best chances of regaining the most useful state of the limb. Now, this we effect by striving to produce ossific union. But I really cannot but think, after all, that the want of bony union in all these cases, is to be attributed principally to the imperfection of the mechanical treatment which is applied to the limb. For, in the first place, as to the obstacle, of the want of apposition, I am sure I could shew you that the muscles by which this impediment is produced may be completely controuled. Then, as to the deficiency of vascular supply in the head of the bone, and of consequent organic power to generate ossific matter, I can only observe, that you have deposits—if not of bone—certainly of ivory patches, sufficient to satisfy you that there exists in the separated head a power to produce the substance necessary for a complete union. But on this part of the lecture I shall not say more until I have spoken to you of

Fractures external to the Capsular Ligament.

The fracture of the neck of the thigh bone external to the capsular ligament, is much more easily recognized than that which is within—it generally occurs more early in life—it results often from a less degree of violence—a blow on the trochanter, for instance, will produce it; there is also more swelling and pain about the joint, and the trochanter is drawn upwards and forwards towards the crista of the ilium. You will then have shortening of the limb—but not to the extent that takes place in the internal fracture, for it does not generally exceed an inch: the foot is everted—the toes are turned out—the motion of the limb is attended with considerable pain. The crepitus is easily felt, and that too without its being necessary to make extension. The species of fracture to which I am now directing your attention is subject to a variety of modifications, which of course produces a corresponding variety of symptoms. Some of these are worthy of mention. You may find, for instance, that there is no shortening of the broken limb, a consequence which you know results from the coverings of the bones, either remaining entire or not being sufficiently lacerated to allow of material separation. I had a case some time ago under my care, where the nature of the accident was rendered very doubtful from this circumstance. In the next place, you may meet a patient, who having experienced this accident, is yet able to walk. One of the sisters of Guy's Hospital fell near London Bridge, and broke the neck of the thigh externally to the capsule. She walked over London Bridge, I mean the old London Bridge—with very little assistance for a short part of the way. Here no fracture could be immediately ascertained, but there was shortening of the limb, and there is no doubt now but that a fracture existed. Then there is another circumstance of importance which you must be prepared for, namely, the possibility of the fractured neck being forced into the medullary structure of the superior part of the femur, and being there so firmly locked as, in the first place, to prevent shortening of the limb; and, in the next place, to enable the patient to walk. Here is the representation of a specimen of that sort of accident (showing a drawing). You observe how the neck of the bone is fixed into the top of the shaft, and you will easily believe, that with such firm support the patient was well able to walk.

Treatment—Now, gentlemen, with respect to fractures external to the capsule, I think I may observe, that there is no doubt whatever as to the practicability of uniting the broken surfaces by ossific matter, and therefore the only question which remains for us to consider is, what are the means best calculated to favour such a union? I beg to remark, that I am now about to speak of the treat-

ment which is applicable to fractures of the neck of the femur, whether within or without the capsular ligament. The indications are all perfectly clear as to the necessity of maintaining uninterrupted coaptation of the broken surfaces. First of all, the pelvis must be rendered perfectly immovable, and the shaft and neck of the bone should be equally fixed, in order to prevent that displacement, which the slightest motion will not fail to produce. Secondly, you must counteract the influence of the muscles—the glutæi, from which displacement also may be apprehended; you employ, therefore, extension for this purpose. Thirdly, you prevent eversion or inversion of the limb, lest the fractured surface should be separated. Now, to fulfil these necessary intentions, I must observe to you, that all ordinary modes of treatment appear to me very defective. Sir Astley Cooper recommends for those fractures that are external to the capsule, the employment of the double inclined plane, and a long splint. But you at once see that this is an objectionable plan, since it includes no provision for fixing the pelvis; so that instead of fulfilling the intended object, the double inclined plane used in this way, only tends to facilitate the separation of the fractured extremities. Besides, there is no mode provided in this plan for keeping the limb extended, and for thus opposing the operation of the glutæi muscles. Another mode of treatment, originating with Dessault, and amended by Boyer, consists in placing the limb on a long splint, extending from the pelvis to the foot.

(Mr. Green having explained the disadvantages of these and other modes usually adopted of treating fractures of the neck of the femur, proceeded to the plan which Mr. Amesbury proposed, and to which the lecturer gave a decided preference. It would be perfectly useless for us to attempt explaining Mr. Amesbury's apparatus, without that assistance of the various materials themselves, by the exhibition of which, Mr. Green succeeded in making his description intelligible.)

CLINICAL LECTURES,

*Delivered at St. Bartholomew's Hospital,
in January, 1832.*

By WM. LAWRENCE, ESQ. F.R.S.

CAUTION TO YOUNG PRACTITIONERS.

GENTLEMEN,

In the course of your practice you will often have occasion to exercise great caution and vigilance in ascertaining the nature of the complaints with which the patients who consult you represent themselves to be affected. You will have to guard against attempts at deception; and you will do well not to trust at all times to the explanations which you may hear. I am about to describe to you

an instructive example, which particularly illustrates this precept. A young woman was recently received into this hospital, and her disease was said to be gonorrhœa. She was a patient in Faith's Ward. After a few days the discharge from the vagina was observed to be of a colour very different from that usually seen in the gonorrhœal fluid: it was dark-coloured, and almost intolerably fetid. A suspicion began to be entertained that the disorder was of a more serious character than was at first supposed; an examination of the uterus therefore became necessary. Upon carrying the finger to the os uteri, I felt it somewhat hardened; and from it protruded a substance extremely soft and elastic, which bore no marks of polypus, or indeed of any other uterine excrescence with which I am acquainted. It was elongated—not very large—and appeared to be attached to the internal surface of the uterus by a very thin peduncle. I found no appearance of disease in the uterus, and I concluded that this growth could have been easily removed. In the meantime the chloride lotion was used, and the discharge was deprived of its foul odour at least. This young woman had been a companion to some gentleman, but her complaint, as she herself acknowledged, was a complete bar to that fruition which she was led to expect. I determined upon extirpating the tumour; but before doing so, I thought it prudent to request of Dr. Conquest, whose peculiar experience might have enabled him to form a better judgment than I could of the young woman's disease, to visit and examine her. He accordingly paid her a visit. He proceeded to an examination; but he could not declare the nature of the tumour—although he said that he was sure he could remove it without much trouble. He was urged, however, to do so; and after examining a second time, he pulled away the substance, which proved to be nothing more or less, gentlemen, than a piece of—sponge! (A laugh.) It had been there for a considerable time—it was productive of great uneasiness—and it was deliberately placed in the position which it held, in order to answer certain purposes, which do not require to be more particularly specified. But this will be a lesson to you, exhorting you to be upon your guard, and to take care that you do not implicitly rely upon representations which you cannot yourselves confirm.

Gonorrhœal Ophthalmia in a Female.

Gentlemen,—We have at this moment in the Hospital a remarkable example of acute gonorrhœal ophthalmia in a female. Such a case I apprehend is extremely rare—at least I do not know that I have ever before seen the disease in a woman; though, as you are aware, it is abundant enough amongst the males. I must mention to you a distinction which prevails in this causes of this disease.

It results from the direct application of the matter of gonorrhœa from the urethra to the eye,—but there are cases of gonorrhœal ophthalmia which we cannot trace to the urethral discharge, but which are said to arise from the cessation of that discharge; that is to say, that the disorder passes to the eye by metatasis—or that there is a translation of the disease from one organ to another. We do not mean by these expressions to say that there is an actual transfer of the causes of disease from one part of the body to another—we only wish to declare the fact, that there is a change of the seat of the disorder, and that the morbid discharge ceasing below, the eye becomes suddenly inflamed, and yields a fluid of the like character. Now, a principle of transition like this seems to prevail in the rheumatic affections, which pass to different parts of the body.

The name of the present patient is Julia Taylor, and her age is forty. She admits that she contracted gonorrhœa about a month before her admission; that the discharge was stopped at the end of the first fortnight, and that at the expiration of that time she felt great pain in the head, and soreness of the left eye, from which an unusual quantity of tears flowed. On the fourth day after these sensations began to be felt, the pains increased, and the colour of the discharge from the eye was puriform. A week afterwards the right eye became affected, and finally the poor woman came to this hospital. No medical treatment was employed up to this time, and you have therefore an opportunity of seeing the influence of gonorrhœal ophthalmia upon the eye, unchecked by any of those remedies which medicine affords. I am sorry to say that the left eye is completely destroyed. Its appearance when she came in was thus: eyelids greatly swollen, chemosis so extensive as to conceal the cornea, and to substitute, as it were, in its place, a dirty surface, covered with a copious discharge, similar to that which usually flows from the vagina during gonorrhœa. It required but little inspection to ascertain that the clear cornea was destroyed by sloughing or extensive ulceration. At the same time we observed in the conjunctiva of the right eye a slight infiltration. On the evening of her admission, the 10th January, twelve leeches were applied to the right eye, and six to the left, and a warm bath was ordered. Next day the symptoms, contrary to all expectation, were increased: the right eye was affected with chemosis, and was evidently the seat of acute gonorrhœal ophthalmia. I ordered, on the 11th, the most active antiphlogistic treatment, pills of calomel and jalap, saline aperients, and cupping from the temples, together with leeches. A moderation of the symptoms occurred next day. On the 13th, the leeches were renewed. On the 15th, a blister was applied to the neck. You see, that still the antiphlogistic treatment was required, although the

general powers of the patient were much reduced; and this treatment succeeded in checking the progress of the disorder. On the 16th the inflammation was diminished so much as to allow the employment of tonics, which were certainly indicated by the reduced condition of the patient.

In cases of purulent inflammation of the surface of the eye, you do not always succeed by employing antiphlogistic means. The mucous membrane you will sometimes find to be no longer the seat of disease, but it is swelled, and yields a discharge. The patient has a feeble pulse, and his skin is pale. Tonics internally, and astringents applied locally, under these circumstances, we find to be attended with the best chances of success.

In the highest state of the inflammation of the eye, you will find the discharge to be thick and yellow; but when the discharge is on the decline it always becomes thinner and whiter. You see the same effect in the purulent ophthalmia of children.

The examples of gonorrhœal ophthalmia, which I have observed in the male, are uniformly attended with the continuance of the discharge; in greater or less quantities from the urethra. Generally speaking, the urethral discharge is lessened, but it always goes on in some degree. Here, however, the vaginal discharge has altogether ceased.

Now, gentlemen, it is a question how far we might have been able to arrest the inflammation of the right eye by an astringent lotion, say four grains of the nitrate of silver to an ounce of distilled water. I am not aware that any good effect has resulted from such an application, but I see no objection to it; and I, for one, am ready to use any means that are likely to stop the rapid course of the changes which result from inflammation in the eye. In this instance, however, I have thought it prudent to employ those remedies only which I have proved to be of service in similar cases. In conclusion, I should say, that where gonorrhœal ophthalmia attacks the second eye in succession, it is generally likely to be saved. The reason is, that the state of the eye in the first attack, causes the patient to be more vigilant when a succeeding attack occurs; but as the first complaint in the case before us was not subjected to medical treatment, we know not how it may ultimately terminate.

CLINICAL LECTURE,

BY

HENRY EARLE, Esq. F. R. S.

*Delivered at St. Bartholomew's Hospital, on
25th Jan. 1832.*

CHIMNEY SWEEPER'S CANCER.

MR. EARLE, in the present lecture, called the attention of the class to a well marked in-

stance of the above disease, which occurred in a patient named Bennett, aged 28, now in Baldwin's Ward. He had an affection of the inguinal glands, which was no doubt produced by soot, and was analogous to chimney sweeper's cancer. The first thing that struck him, on examining the patient, was the peculiar ammoniacal odour (characteristic of this disease), which arose from the exhalant vessels. There was a deep chasm in the groin, surrounded by ulcerated edges. They seemed disposed to throw out a fungous growth, which in these cases generally attacks the common integument.

The patient at first denied having ever had any thing to do with the business of a chimney sweeper; but on being pressed upon the subject, he admitted that about fifteen years before, he had been employed in carting soot, and at times had warty excrescences on the scrotum and groin. At last the inguinal glands became affected. From the circumstances of this case, there could be no doubt that the disease was caused by soot. This was not a disease of common occurrence, or one of little importance; on the contrary, it merited serious attention, from the malignant character which it generally assumed, and the fatal consequences which marked its course. He should read some notes which he had collected on this subject some years ago. The chimney sweeper's cancer has been classed amongst the number of malignant diseases, and is thought to be at first caused by a peculiarly stimulating property contained in soot. It was well known that a great deal of ammonia was contained in soot, but what it was that caused the disease in question, had not been as yet ascertained. However, it was well known to be peculiar to those countries where coals were used as fuel. This disease was described by Pott, who had published the only accurate account on the subject. He (Mr. Earle) having formerly attended a number of stations occupied by the sweeps, had been enabled to collect a mass of cases of this disease, the results of which were confirmed by subsequent experience. As that inquiry had led him to form some exceptions to the rules laid down by Pott, it was the more important to state them for the information of the pupils. The disease in question was invariably produced by soot, applied to the rugæ of the skin and scrotum; it commences with warty excrescences, which may remain stationary for years, and depending upon various circumstances. The patient in the present case was attacked gradually till six years ago. After some time the disease reaches the skin, throwing out a peculiar growth with a scirrhous hardness, and a peculiar odour very different from that which proceeds from those warts that are sometimes found on males and females from other causes. This growth increases by degrees, and ultimately involves the parts contiguous. According to Mr. Pott, the disease always

commenced on the lower part of the scrotum; but this was not invariably the case, as the following remarkable instance would prove: A few years since, a gardener, shortly after strewing some soot over a garden, to destroy slugs, observed an extensive growth of warts make its appearance upon his wrists. Amputation was found requisite to insure the patient's recovery. This disease will sometimes attack the common integument of the cheek, and he himself had seen many instances of this kind in chimney sweeps. The disease, when it attacked the scrotum generally, advanced to the adjoining parts, spreading to the perineum and boundaries of the anus, not unfrequently affecting the testicle; ulceration and sloughing sometimes take place, and spread to the body of the testicle. It would appear from various observations, that its progress in glandular parts was different from that which takes place in the common integument. In the present case, a large chasm formed in the groin, and was making its way into the cavity of the abdomen, the edges throwing out that peculiar secretion which is so characteristic of this affection. The disease always spreads to the contiguous parts, clearly proving that it did not commonly proceed in the course of the absorbents. He (Mr. Earle) was acquainted with a case in which a bubo made its appearance: the bubo suppurated, and assumed a character similar to the primary affection. The individuals attacked by this disease were generally of a pallid hue, with wan and leaden countenances; their general health was greatly affected; but the circumstance which particularly deserved their attention, was that peculiar secretion and ammoniacal smell which, if once recognized, could never be mistaken. Indeed, the odour in such cases formed as certain a diagnosis, as the smell in various other diseases, such as rheumatism, phagedæna, &c. It would be of great use to recollect these distinguishing signs, as they lend much assistance to the surgeon. The infrequency of this disease would be explained, by its seldom attacking persons under thirty years of age; very few cases occurred between twenty and thirty. Children were not liable to this affection; and it was some consolation to humane individuals to be aware of the fact, as it was generally supposed that the children bound to this trade, were doomed to a life of suffering in every respect. The man now in the hospital, had never been apprenticed to the trade, and was not attacked with the disease for a considerable number of years. From a long course of observation, he (Mr. Earle) considered that there were strong grounds for supposing that a constitutional predisposition was required for the development of this disease, an idea which was materially corroborated by the fact of children not being liable to its ravages. Most of the cases which he had observed, were in persons between the ages

of thirty and forty; and it was often twenty years before those individuals were affected, as was fully proved in the case of the patient now in the hospital. It was also a singular fact, that the disease showed itself in particular families; as he had known two or three generations which had fallen victims to its effects, and all about the same period of life. Indeed, there could be no doubt that a certain state of constitution gave rise to the disease.

With respect to the mode of treatment, he had no hesitation in saying, that, as far as he knew, no topical or internal remedy could be of use; the scalpel was the only resource, and it might be relied upon with confidence, provided that care was taken to remove the entire of the diseased mass. When the glands in the groin were affected, he pursued the same practice; even when the testicle was attacked with disease, it would be right to give the patient a chance by removing the affected testis, provided the spermatic cord were sound. A case, illustrative of the success of this practice, occurred last July twelve months, in a patient who came to the hospital in a hopeless state. The inguinal glands were enlarged; there was a local affection occupying the whole of the scrotum; the testicles were involved in the disease, so that it was necessary to remove both; the entire scrotum was removed, with both testes, and it was even judged prudent to dissect away a considerable portion of the corpus spongiosum of the urethra. Notwithstanding this extensive excision, the patient is now alive, and perfectly well; and the disease in the groin is subdued. The man ran a great risk, as considerable inflammation of the integuments supervened: there were large sheets of sloughing of the integuments, and at one time he had a slight attack of trismus; the wound sloughed in the perinæum, and allowed an exit to the urine in that part, but it subsequently closed, and the man now makes water in the ordinary way. This case afforded a proof of the entire locality of the disease. In another instance the disease was so completely local, that it was only necessary to remove part of the tunica albuginea. As the result of his experience, he should in all cases recommend the extirpation of the diseased part, and to some extent beyond its influence. But he would at the same time require the patient to abandon his business, as a return to it would be almost certain to bring on a return of the disease. From the rapidity with which this disease proceeded, when once established, no time should be lost, and the operation should be extensively performed. He was sorry to add, that the present case was beyond the power of the knife, for the ravages of the disease in the groin were of so malignant a description, and they spread so rapidly to the cavity of the abdomen, that he could only look forward to a fatal termination.

He had heard of various remedies employed for this disease, and particularly *iodine*, lately tried in a case at St. George's Hospital, but he understood it produced no good effect. In his opinion, time would only be lost by using such remedies, as the only certain plan was the immediate extirpation with the scalpel.

INTRODUCTORY LECTURE TO A COURSE ON FORENSIC MEDICINE,

*Delivered in the Anatomical Theatre of
St. Bartholomew's Hospital,
Jan. 24, 1832.*

BY GEORGE BURROWS, M.D.
Fellow of Caius College, Cambridge.

GENTLEMEN,

Appearing in the Medical School of St. Bartholomew's Hospital, as a public teacher upon a branch of science hitherto much neglected in this place, and but very recently regarded in any other medical school in this metropolis, I feel the responsibility of my situation, and the difficulties which surround me in making this course of lectures, as instructive as I could desire, and as interesting as the subject admits of. Standing beneath the bust of our lamented and distinguished teacher, who almost founded this school, who once adorned this chair with talents, which few can hope to possess, whose originality of thought, extensive stores of information, and peculiarly happy manner of expressing himself, attracted to this school crowds of students from every part of the British empire. Standing in the place of such a master of his art, I shrink within myself, lest any one here should be led to make comparisons with the individual, who now has the honour of addressing you.

The other branches of medical and surgical science have long been taught in this school by able and eminent men. Some gifted with ready powers of eloquence, others familiarised by a constant and persevering devotion to their peculiar departments of science, and by long experience in the art of teaching, are enabled to communicate their knowledge with facility and perspicuity. I can boast of none of these advantages, and have therefore many reasons to claim your indulgence. To those around, who are pupils of St. Bartholomew's, I could wish to participate a share of the gratifying feelings I now experience, in being raised to this honourable station, from which I now address you for the first time. Twelve years ago, I entered this medical school as a student, animated with the same hopes and influenced by the same feelings as yourselves. I trust that nothing but a patient and continued application to the various branches of medical

education on my part, has induced those with whom this appointment rested, to allow me to advance from the rank of the student to the chair of the teacher.

Be assured, my fellow pupils, that the same road is always open to you, and that similar well directed exertions will infallibly lead you to corresponding success. Your studies indeed are already various and difficult. This course of lectures on forensic medicine is an additional labour imposed upon you: but let not this discourage you, nor let any feeling of hostility spring up against those, who require more knowledge at your hands before they grant you the licence to practise your profession. Remember that knowledge is power. With an increase of knowledge, your sphere of doing good is extended; you are raised so much higher in the estimation of the educated classes of society. I cannot allow this opportunity to escape me of paying a public, but humble tribute of approbation to that corporate body under whose superintendence is placed the direction of the education of so large a portion of the medical profession.

Before the Court of Examiners of the Society of Apothecaries was appointed by act of Parliament in the year 1815, one branch of the medical profession was notoriously deficient in the essential qualifications for practising the healing art; and in a corresponding low degree of estimation with the public of this country. The medical attainments of this class of practitioners were then little more than a knowledge of pharmacy and a few empirical notions on the treatment of disease, acquired during a long and almost useless apprenticeship. The act of Parliament, which empowers this Court of Examiners, was obtained by the united exertions of an association of general practitioners, who felt the deficiencies in the medical education of their own branch of the profession. The active and indefatigable chairman of that association, I shall always be proud to say, was a near and dear relative of mine. If that individual had done nothing else for raising the character of this branch of the profession, and had conferred no other benefit upon society in general, than the improvement of medical education, I should not hesitate, I hope with becoming modesty, to declare, that his name ought never to be forgotten by his professional brethren. The powers vested in that court of examiners has been exercised wisely and judiciously. The standard of medical education of the apothecary, and with education, his place in the estimation of society, has been gradually raised to a rank more in accordance with the advanced state of knowledge of the present age, and more becoming the condition of one, to whom such important and confidential duties are entrusted. Within a short period there has been a tendency in that court to raise their standard of education very rapidly, and to demand

qualifications perhaps more than requisite for the ordinary duties of medical practice. They should reflect that a competency of knowledge is sufficient, and that by expecting too high attainments, they not only increase expenses, and impose unnecessary difficulties on the education of the general practitioner, but may raise him above the sphere, where he is generally called to act, and where he will be most useful.

The general practitioner, who is about to fix himself in this metropolis, or in any populous town, may immediately obtain a reputation and extent of practice, which will amply compensate him for the time and capital expended in qualifying himself for his profession. If higher qualifications or a longer course of study were required of the individual, who is about to settle in a retired country town or village, I think that no success that he could there attain, would ever sufficiently repay him for all his toil and expense in the acquirement of a due knowledge of his profession. This feeling is my apology for a digression from our immediate subject. The Court of Examiners has deserved well of the public and of their profession. Let them pause before they advance further, and remember that wise Horatian precept,

*Est modus in rebus, sunt certi denique fines
Quos ultra citraque nequit consistere rectum.*

I shall now proceed to the consideration of the more immediate subjects of the course of lectures I am about to deliver, in conjunction with my friend, Dr. Roupell. The branch of science, on which I now enter, has received various denominations. In France and Italy, it is called legal medicine; in Germany, state medicine; and in this country, it has been designated, indifferently, medical jurisprudence and forensic medicine. The former term I should prefer, as more usually adopted, and as more comprehensive. Under it I should comprise, forensic medicine, *i. e.* those parts of medical sciences, which are required to elucidate questions occurring in courts of law; and political medicine or medical police, which points out the most judicious means of preserving the public health. In compliance with the regulations for medical students issued from the Court of Examiners, we have designated our course, on Forensic Medicine.

This, however, will not preclude us from introducing those principles of medical police, which it is very desirable, that the medical student should be taught, and of which he will have better opportunities of acquiring a knowledge during his professional education in a great metropolis than in any other situation. Writers on this science have generally given an historical sketch of its commencement and progress from the earliest times, but when we reflect on the subjects of which it treats, *viz.* the administration of justice between man and man, and the preserva-

tion of the health of the community, it must be acknowledged, that although it may not have been cultivated as a separate branch of study, still it must have ever been highly interesting and valuable, even in the rudest states of society. The due administration of justice, and the preservation of the public health, are the inestimable blessings, in which all men are equally interested, and they would naturally encourage these means, by which they may be attained and preserved. It may be readily conceived, that in any primitive state of society, points of dispute must have been of the simplest nature, and that common sense, aided by integrity, was alone sufficient to administer justice.

In the progress of civilization, however, new wants and complicated arts and sciences rendered disputed questions more difficult of solution. The evil passions of mankind, also, soon availed themselves of the subtlety of sophistry to obscure the truth.

In such an advanced state of society, an ordinary individual, unassisted, would no longer be able to administer impartial justice. Hence we find from the earliest records of civilized nations, that men of science were called upon to assist in judicial trials of difficulty. History informs us, that more than two thousand years ago, a king of Syracuse suspected his goldsmith of having alloyed the gold of his royal crown; but he was unable to detect the fraud. He applied to the great Archimedes to assist in bringing the offender to justice; and this profound mathematician, by the application of a simple hydrostatical principle, soon detected the imposition. In the high state of civilization in which we now live, numerous and complicated are the points of inquiry, which come before our judicial tribunals, and these cannot be decided without the assistance of men of science. Questions the most delicate and difficult, questions which involve the best and dearest interests of society, affecting life, and reputation, and property, are constantly agitated in the courts of law; and which can only be elucidated by the evidence of a well-educated medical man. He may, by his testimony, rescue a fellow-creature from incarceration for life; from the ignominy of the gallows; from living branded with infamy; or he may by his superior and professional knowledge be the means of bringing to justice and punishment, the violator of female chastity, the cunning murderer, who has resorted to unsuspected and insidious means to effect his inhuman purpose; or he may throw some light upon those deeply interesting, but most revolting crimes, when the young mother, in the moments of anguish and despair, may resort to criminal means to annihilate the fruit of her womb, or even to destroy her offspring, which should draw its life from her bosom. If these are not points of sufficient importance to claim, nay, to rivet the student's attention, and to command the best

energies of his faculties in the prosecution of the study of this science, I am sure, that no reasoning or persuasion of mine can ever find its way to his understanding. Such are a few of the highly interesting topics to be treated of under the head of Forensic Medicine. The rise and increase of diseases among communities, engendered partly by vicious habits, and often by too densely congregated population, soon forced on wise rulers the necessity of police regulations to prevent the propagation of contagious disorders. The earliest extant code of laws, preserved in the Pentateuch of Moses, gives numerous proofs of how much attention was paid among the Jews to the preservation of public health, by the enjoinder of habits of cleanliness, and by enforcing various quarantine regulations upon strangers and upon those of their own nation, who had held communication with persons or things, which were impure or unclean. Medical police then treats of the principles, on which are founded legislative enactments for the preservation of the public health, and for the prevention of contagious disorders.

The wisdom of such legislation depends upon the most profound knowledge, both of natural and moral causes. Such regulations for the public good exist in all enlightened governments. That statesman, who will turn his mind from the more captivating and exciting subjects in the wide field of modern politics to the framing of laws conducive to the health and moral happiness of his fellow-countrymen, deserves more lasting honours than the victorious warrior, the skilful financier, or the dexterous diplomatist.

It may perhaps be considered a disadvantage of the popular form of government under which we happily live, that the executive powers do not sufficiently interfere for the preservation of the public health, for the encouragement of men of science, and more particularly for the protection and public remuneration of medical men, to whom the nation at large is so much indebted, and to whose skill, fidelity, and honour, their dearest interests are so often entrusted.

The crowded population of this metropolis, the low standard of morality amongst us, which of course exists chiefly in the lowest grades of society; the multiplied sources of luxury, produced by the wonderful refinements of modern art; the various and complicated chemical processes, which are hereby going on in our unrivalled manufactories; the merchandize, which daily arrives in our ports from every clime of the inhabited world, all tend to vitiate the atmosphere, and to generate disease, and multiply its varieties in this our artificial state of existence. To prevent these fertile sources of misery from pouring forth contagion and death throughout the country is an object surely of the highest importance. But to legislate wisely upon this subject requires great scientific know-

ledge, pure philanthropy, and true patriotism. The legislator must not ignorantly, or unnecessarily interfere with the manufactures, or throw needless and vexatious restrictions upon commerce; or he may unwittingly destroy the very springs of our national greatness.

Our wealth, our very national existence, depends upon our commercial prosperity: it is that which has brought us, as it did of old, Tyre, Carthage, Venice, and Holland, to such an eminent station among the powers of the world. Neither must our domestic laws interfere too much with the liberty of the subject, the greatest blessing of the free-born Englishman.

Governments, more despotic than our own, with a pretended paternal care, take charge not only of the health of their subjects, but of their minds and consciences also. Those who have visited the fair land of the revival of arts and learning, unhappy Italy, now groaning under the iron sceptre of Austria, must have observed the admirable system of police that prevails there. Their "Cordon Sanitaire" not only guards them from the baneful influence of infected merchandise from the East, and from the South, but most effectually intercepts the entrance of every thing from the West, or from the North, that may tend to improve their moral and intellectual condition, or that may increase in them the prevailing and increasing love of freedom.

The outward forms of morality, and the health of the community, are certainly better protected by their system of police than amongst ourselves. But is this any recompense for the loss of liberty of person and speech, and of every institution which distinguishes a nation of freemen from slaves? The necessity of establishing measures of prevention is manifest; if not, the disease engendered in one might communicate to thousands. Ignorance and carelessness hinder the lower orders of society from taking precautions for themselves; it is therefore the duty of governments to do so for them; more particularly in insuring cleanliness in the public streets; in guarding against the contamination of the sources from which the capital is supplied with water; and in prohibiting the existence of manufactories injurious to the health of a neighbourhood. The near approach of the direful pestilence, which ravages the continent of Europe, and which has steadily continued its progress westward, which has even now reached the shores of our sea-girt Isle, even to us the

"*Penitus toto divisos orbe Britannos.*"

more particularly calls for the active interference of the government in enforcing regulations for medical police upon the community, in spite of the popular clamour or

artful insinuations of the self-interested. The multitude is always blind and prejudiced against the means afforded to them against contagious disorders. Look at their long-continued indifference to the simple proofs of vaccination, although so great a safe-guard against the ravages of the small-pox. How often would the plague desolate the fair climes of the South of Europe, if quarantine laws were not enforced to protect the unthinking from its fatal consequences! Famine and her daughter Pestilence, in former ages, were constantly recurring scourges in this and other countries. Happily, the various new kinds of food discovered by art, and the improvements in agriculture, now render famine next to impossible in a highly civilized country. The advantages derived from a close attention to these subjects are best witnessed in the greater healthiness of our prisons, our barracks, our ships of war; and not less so in the diminished mortality of our hospitals, of the general population, and of this metropolis in particular.

Any of the foregoing questions may be the subject of parliamentary inquiry, and as scientific men you may be called in evidence. I think they are therefore well worthy of the attention of the medical student, that when summoned to give his opinion, he may do credit to himself, and render an essential service to his country.

Having pointed out the nature and extent of the science of forensic medicine, and the absolute necessity of its forming a branch of medical education, I shall now unfold the plan we have adopted for this course of lectures.

It is stated in our prospectus, that the object of these lectures is, to teach the application of the medical sciences to the elucidation of questions occurring in courts of law, and to inform the medical practitioner how to prepare himself for, and conduct himself under examination in a public court of justice. It is not our intention to swell out the course to a great length by the narration of numerous trials, which, however much they may gratify idle curiosity, throw but little light upon the questions to which they refer. Nor do we intend to enter upon long disquisitions on the state of the law upon particular questions, with which, in my opinion, the medical man has but little reason to interfere. We shall relate those cases which appear most instructive, either as applications of the principles we wish to enforce, or to point out the mistakes of our professional brethren in giving evidence, hoping thereby to warn others from similar stumbling-blocks. We shall state so much of the existing laws as it is right and necessary that every man should know, that he may be able to facilitate the ends of justice.

Sensible of the immense importance of establishing, by inductive evidence, the doctrines we teach, we shall embrace every op-

portunity that presents itself, of illustrating them by such cases or examples as are accessible to us. In this respect, we fortunately possess some advantages superior to many other lecturers on this interesting branch of medical science; and without which I am of opinion that little instruction can be conveyed to the pupil, however competent the teacher. I mean that an abundant source of illustration is afforded by the numerous casualties constantly received into this vast and excellent hospital, and to which the student's attention will always be directed, when possible.

Here observations on the living, and on the dead, will afford tests of the truths we wish to enforce, and convey in the most impressive manner lessons never to be forgotten, or acquired in the course of private practice. To those gentlemen around me, who will at any time communicate the authentic details of cases coming under their own observation, and which may be useful in the elucidation of any part of the course, we shall feel peculiarly grateful. I have also requested several barristers, personal friends, to favour me with the notes of causes occurring on different circuits. By such means I hope to collect authentic illustrations of the numerous subjects to be treated of in the course. The printed syllabus of the lectures will acquaint you with the classification we have adopted. Various systems have been proposed by different writers. Some have selected a physiological arrangement, others have classed the topics, according as the litigated questions would be tried in a criminal or civil court of law. It has appeared to me that a very natural division might be adopted in the following manner:

1. All those questions relating to the death or injury of individuals, whether arising from violence, accidents, or any other sudden cause.

2. All questions relating to the social condition of individuals, and which may become the subjects of legal inquiry.

Preparatory to the lectures in question, relating to injuries, accidents, and violent kinds of deaths, I shall give you one general physiological lecture.

To those gentlemen who have already nearly completed their medical studies, such an exposition of the physiological principles which ought to guide every man, in the examination of such questions, may be perhaps unnecessary. Still I feel that they will be much better able to appreciate my views on these various subjects, by being made acquainted with the principles which would guide me in such investigations.

To other medical students, who are not so far advanced in their studies, or to any gentleman of the legal profession who may honour us with their attendance, and who most likely have not devoted much of their attention to

physiology, such a preliminary lecture is indispensable.

I cannot hope to make this part of the course intelligible to them, unless they have some clear ideas on the reciprocal influences of the brain, the lungs, and heart, upon each other. I must presume them already acquainted with the ordinary functions of these three important organs in the animal œconomy. They ought also to thoroughly understand the general anatomy of these parts.

If they intend to make a practical use of these lectures, to apply their knowledge to the better examination of medical witnesses—to elucidate truth—to expose ignorance—to be enabled to appreciate medical testimony—I beg to impress upon them the necessity of a thorough knowledge of these points in physiology. In every case of sudden death, whether from accident or from violence, it is the duty of a medical man to make a full and complete examination of the deceased person's body, before he ventures to give evidence as to the cause of death in a court of justice. Most medical students have had opportunities of making examinations of bodies post mortem, but these are generally made to clear up, or confirm their ideas upon the pathological condition of some particular organs of the body. Such a partial examination of the body as this, is by no means sufficient, when they contemplate making a report to a coroner's jury, or giving evidence in a court of law.

I shall, therefore, at some length, explain the most convenient method of conducting the examination of the dead body, and shall call their attention to many phenomena observed in the corpse, which are the consequences of death; but which, when any suspicions have been raised upon the cause of death, are too often mistaken for the effects of violence.

That medical men, who have had the advantage of an education in this or some of the great medical schools in the metropolis, should so often expose their ignorance by their evidence in courts of law, or before coroner's juries, upon questions referring to sudden or violent death, is to me quite surprising.

[We are extremely sorry that our limits compel us to defer the remainder of this able and perspicuous lecture until our next.]

(To be concluded in our next,)

On the Therapeutical Properties of Iodine. By Drs. Lugol, Manson, Gardner, and others.

IN the last number of our Monthly Journal, we gave a full detail of the formulæ of iodine employed with such astonishing, indeed, we should almost say, with incredible good effects, in the cure of every form of scrofula, whether glandular enlargement in the neck, axillæ, groins, mesentery, in ulcers however extensive, in abscesses, fistulæ, caries, venereal affections in strumous habits, in cancerous ulcerations of the face and scalp, in scrofulous ophthalmia, in cutaneous scrofula of the nose, upper lip, and cheeks, large abscesses of the neck, fistulæ of the thigh, knee, &c. white swelling of the elbow, shoulder, ulcerations of the hip, caries of the vertebræ, lumbar abscesses, and caries of maxillary bones. We shall insert the formulæ in the course of this article, with a concise account of the circumstances and precautions which must be carefully observed as to the proper employment of this most important remedy.

Mr. Aldis has just published an account of the medical properties of iodine, which appears to have been arranged subsequently to the translation of M. Lugol's publication. He commences by referring to a work on pulmonary consumption, by Dr. Schroeder Van Der Kolk, published at Amsterdam in 1826, in which the writer records the diuretic property of iodine in ascites. Mr. Aldis next alludes to the reports of Dr. Manson on the effects of the remedy in bronchocele, paralysis, chorea, scrofula, fistula lachrymalis, deafness, dysphagia, white swelling, and distortion of the spine. The statements of this able physician were received with scepticism by the greater part of the profession in these countries, but he has now the pleasure and satisfaction to reflect, that he was the first who introduced the use of iodine into British practice, and that his opinions are

not only corroborated, but the efficacy of the remedy which he advocated, is proved to be far greater than he imagined.

Mr. Aldis gives a good account of the opinions of some of the writers on the effects of iodine. He states that iodine was accidentally discovered in 1812, by M. Courtois, a manufacturer of salt-petre at Paris, though others assert that it was first detected in the refuse of soap-lees. Mr. A. observes:—

“ In procuring carbonate of soda from the ashes of sea-weeds, he found the metallic vessels greatly corroded by the residual liquor; and, on further investigation, discovered this new substance. In 1813, it was illustrated by Clement and Desormes; its real nature was soon after determined by Gay, Lussac, and Sir Humphrey Davy, who proved that it is a simple non-metallic substance, exceedingly analogous to chlorine. It has been found in various sea-weeds, and it is from the kelp that iodine is obtained in quantities.

“ *Operation.*—Stimulant, absorbent, emmenagogue.

“ *Use.*—In bronchocele and other glandular swellings, not of scirrhus nature: to bring on menstruation in young females, in whom it has not occurred; to assist the cicatrization of venereal ulcers. Cons. Pharm. By A. T. Thomson, M.D. F.L.S.

“ The following are the formulæ recommended by Brera:—1. Tincture of iodine, made by dissolving 48 grains of pure iodine in an ounce of alcohol. The dose for adults is from five to twenty drops, three times a day. The tincture is subject to decomposition, and should therefore be used fresh. Dr. Manson's tincture contains one drachm of iodine in ʒijss. of rectified spirit. Of this he commonly prescribes 30 minims thrice a day. Mr. Buchanan puts ʒi. of iodine to ʒiij. of rectified spirit, and prefers the external to the internal use of the medicine as more efficacious and less likely to create nausea and other

unpleasant symptoms. He has often observed, that when desquamation of the cuticle, and great itching, followed the external application of the tincture, the parts received more benefit than when the cuticle retained its natural appearance.—(On Diseased Joints, p. 86). 2. *Pills of iodine*, made by forming one grain of iodine into two pills, with elder-rob and liquorice-root; one to be taken every morning and evening. 3. *Iodine ointment*, made by mixing a drachm of pure iodine with an ounce of lard, or half a drachm of hydriodate of potass with an ounce and a half of lard; of the former about a scruple, of the latter a bit, about as large as a filbert, may be rubbed on the part to which it is intended to be applied. Dr. Manson's ointment has ʒss. of the hydriodate to an ounce of lard. 4. *Solution of hydriodate of potass*, formed by dissolving 36 grains of the hydriodate in an ounce of distilled water; it is given in the same dose as the tincture. 5. *Solution of the ioduretted hydriodate of potass*, made by dissolving 36 grains of the hydriodate and 10 grains of pure iodine in 10 drachms of water. The dose, in the beginning of its use, should not be more than five or six drops three times a day. From Dr. Kelly's statement, in the *Revue Med.* for June, 1823, it appears that the ointment is made stronger in France than that mentioned by Brera, two drachms of the hydriodate being mixed with an ounce of fat."—p. 11.

Mr. Buchanan, of Hull, has diminished white swellings by applying the tincture with a camel-hair brush to the integuments, which fact corroborates the statement of Lugol. Coster treated a hundred cases of bronchocele with the ointment of the hydriodate of potass, two thirds of which were completely cured. In Dr. Kolk's work, the diuretic influence of iodine is noticed. This writer details a case of ascites in a female aged 59, who also had enlarged liver and jaundice, all of which disappeared by the use

of laxatives, diuretics, and tincture of iodine. The case was under treatment from October, 1824, to Jan. 15, 1825, when the cure was complete. In a man aged 28, labouring under ascites, all diuretics failed except tincture of iodine, which effected a cure. In a female aged 28, who laboured under abdominal dropsy, with "hardness of the hypochondria," the iodine removed her diseases after the ordinary remedies had failed.

It appears, according to this writer, that "much advantage is to be anticipated from this remedy in induration of the liver in scrofulous habits." In the sixth vol. of the monthly series of this Journal, 1831, the reader will find an account of a case of enlargement of the spleen successfully treated by iodine, by Mr. Swift, of Dublin. Dr. Gardner, of Edinburgh, mentions two cases of ascites and one of amenorrhœa, which were not relieved by this remedy. Dr. Murray, of Dublin, Physician to the Marquis of Anglesey, first proposed the inhalation of the vapour of iodine in consumption, a remedy subsequently recommended by Sir C. Scudamore. From the close resemblance of pulmonary tubercles to scrofulous and scirrhus disease, it is reasonable to infer that the internal as well as the local use of this powerful medicine, in incipient phthisis, may be productive of good effects. As Mr. Aldis avows his intention of collecting observations on the use of this remedy, we refer him to our January number for a concise though perfect account of the chemical and medical properties of the various preparations of iodine, now employed with complete success at the Hôpital St. Louis.

The following are a few of M. Lugol's formulæ, but without all his comments, which were published in detail in our last:—

CONCENTRATED SOLUTION OF IODINE.

R̄ Iodinæ ʒj.
Potas. Hydriodat. ʒij.
Aquæ destill. ʒviij.

Dose for adults, six drops in a glass

of water sweetened with sugar, twice a day, increasing every week the daily dose by two drops, until it shall have reached thirty-six drops. For children under seven years old, the dose is two drops twice a day, increased to five daily. From seven to fourteen years, the dose is sixteen drops daily. This solution is not so exact as the following, but is preferred in private practice:—

IODURETTED MINERAL WATER.

℞ Iodinæ gr. $\frac{3}{4}$.
 Potas. Hydriod. gr. $1\frac{1}{2}$.
 Aq. destill. ʒviij .

During the first week the dose is half a grain daily, after the second week three-fourths of a grain, during the fourth or fifth a grain daily; and a grain and a half is the maximum dose.

IODURETTED OINTMENT.

℞ Iodinæ gr. xij.
 Potas. Hydriod. ʒiv .
 Adipis recent. ʒij .

This is used in scrofulous ophthalmia, ulcers, tubercles, &c.

OINTMENT OF PROTO-IODURET OF MERCURY.

℞ Hydrarg. proto-ioduret ʒij , ʒiij , ʒiv .
 Adipis recentis ʒij , ʒij , ʒij .

These ointments produce little pain, and are successfully employed in *esthiomenic* or *corroding scrofulous ulcers*, in persons contaminated by *syphilis*.

SOLUTIONS OF IODINE FOR EXTERNAL USE.

℞ Iodinæ gr. ij. gr. iij. gr. iv.
 Pot. Hydriod. gr. iv. gr. vi. gr. viij.
 Aq. destill. oj. oj. oj.

Injected into the *lachrymal passages*, between the *eyelids*, in *coryza* and *ozena*. In the last care must be taken not to direct too much of the solution through the nostrils towards the fauces.

RUBEFACIENT SOLUTION OF IODINE.

℞ Iodinæ ʒiv .
 Potas. Hydriod. ʒj .
 Aq. destill. ʒvj .

Applied to surfaces that require strong excitement by means of lint, as in chronic ophthalmia, coryza, and ozena—may be added to baths, and poultices.

IODURETTED BATHS.

THE last solution is added to warm water, the quantity being determined by the sensations of the patient. The bath should be prepared in a *wooden box*—is applicable to hands, feet, chin, &c.

IODURETTED CATAPLASMS.

THESE are composed of ordinary materials, as linseed meal, and the rubefacient solution; employed in hard *tubercular tumours* which resist other modes of treatment, as in “cold abscesses.” Injecting the solution into the cyst, rubbing its parietes with the ointment, and then applying this cataplasm, will be necessary in some cases.

CAUSTIC IODINE.

℞ Iodinæ ʒ .
 Pot. Hydriod. ʒj .
 Aq. destill. ʒij .

This form is used when the solution and ointment fail. It is applied twice or thrice a week to the eyelids, nasal fossæ, to repress excessive granulations, to modify the state of the red hypertrophied skin, impregnated with pus, surrounding certain scrofulous ulcers and tubercles. It improves the appearance of soft and fungous tissues in these cases, with a celerity that surpasses imagination.

EYE-LOTION OF IODINE.

℞ Tinct. Iodinæ, gutt. xxx.
 Tinct. Opii., gutt. xxxvj.
 Aq. destillatæ ʒiv .

Applied in obstinate scrofulous ophthalmia.

PLAISTER OF IODINE.

℞ Empl. Lytharg. ʒij .
 Iodine pulv. gr. xxx.
 Potas. Hydriod. ʒij .
 Extract. Opii. ʒss .

In enlargement of the parotid and other glands.

OINTMENT OF IODINE AND OPIUM.

R Iodinæ gr. xv.
Potas. Hydriod. ʒj.
Tinct. Opii. ʒij.
Adipis recent. ʒij.

Applied to scrofulous ulcers.

M. LUGOL exhibits the PROTO-IODURET OF MERCURY in doses of two grains daily, in syphilitic ulcers in scrofulous habits. The medicine is prepared as follows, according to Dr. O'Shaughnessy:—

“Dissolve, without applying heat, a sufficient quantity of pure mercury in one part of nitric acid diluted with three parts of distilled water, and add mercury until no more be dissolved. A proto-nitrate of mercury is thus formed, which frequently shoots into a mass of white crystals. Any excess of metallic mercury is to be separated by inclining the vessel and allowing it to run off, the solution containing the crystals is then to be diluted with distilled water until they are perfectly dissolved; a pure proto-nitrate of mercury is thus obtained, the formation of the per-nitrate being only occasioned by the application of heat and the use of too concentrated nitric acid.

“Hydriodate of potass is to be added to this solution as long as any precipitate occurs. Filtration is then to be performed, the matter remaining on the filter to be well washed with distilled water, and dried in a water bath. As thus prepared, the proto-ioduret of mercury is a fine yellow powder, quite insoluble in water at any temperature.”

The IODURET OF LEAD is considered by far the most valuable of the metallic compounds of iodine. It does not cause cutaneous inflammation, like the preparations of iodine and hydriodate of potass, and succeeds when all these have failed. It was discovered by MM. Cuttereau and Verdet de Lisle.

The dose is from a quarter to half a grain; and the ointment is com-

posed of ʒj. to ʒj. of lard. This medicine is prepared by adding a solution of 100 parts of the hydriodate of potass, to a solution of 75 parts of the acetate of lead. One hundred parts of this compound consists of 54.9. iodine, 45. 1. lead.—M. Henry (fils) Journ. de Pharmacie, Mai 1831. It was discovered by M. Polydore Boullay in 1827, and lately brought under the notice of the profession in Paris, by M. Caventon.

When precipitated in the cold, the ioduret of lead is in a greater measure dissolved by boiling water. The crystalized product deposited from warm water, should alone be employed for pharmaceutical and therapeutical purposes.

We are indebted to the rapid advance of chemistry for the possession of many of our powerful medicines, and of iodine among the number. This medicine, which promises to be one of the most efficacious ever discovered, was found, as before stated, in the refuse of soap-lees and salt-petre, and is afforded by the common seaweeds, so condemned by the ancient classical writers as utterly vile and useless.

Virgil says,

“Refunditur alga;”

and Horace,

—— et algæ litus *inutili*,

Demissa tempestas ab Euro

Sternet.”—Carm. Lib. iii. 17.

“*Vilior alga est.*”—Op. Cit. Sat. Lib. iv. 5.

What an instructive and humiliating lesson is afforded to man, in the plentitude of his wisdom, by scientific discovery! Even the lowly and despicable sea-weed contributes, in the highest degree, to the alleviation of human suffering, and to the promotion of the health and happiness of a large proportion of society.

(To be continued in our next.)

THE

*London Medical & Surgical Journal.**London, Saturday, Feb. 4, 1832.*

IN coming before the medical public with the first number of a Weekly Journal, we feel some confidence that we shall obtain the credit of having fulfilled, as far as a single number would permit, the pledges which we recorded in our prospectus.

The selections from the Lectures of eminent teachers which we are enabled exclusively to publish, will themselves be too sufficient a commentary on their own value, to require of us the addition of one word of eulogy.

The Hospital Reports which will be found in our pages, are carried to an extent which, we are convinced, will meet with the approbation of the Profession: and we beg it to be understood that the same scale of description of Hospital practice will be maintained in every succeeding number.

The remaining contents of the Journal demand no particular observation from us. We shall, however, in future be able to present to our readers an abundance of miscellaneous intelligence immediately connected with the affairs of the profession.

The time in which we are called on to interfere with renewed activity in medical concerns, is one of peculiar importance to the profession. A crisis has arrived, the results of which will have the most decided in-

fluence upon our common interests. The necessary and just claims of the science to which we are devoted, are now openly resisted; and what with the apathy of some of the Profession, the open hostility of others, and, what is worse, the treacherous enmity of pretended friends, the staunchest advocates of a just cause are nigh overwhelmed by the force of ignorant and untameable prejudice.

For our own parts, it will be our task to exhibit, by impressive examples, the beneficent, the assuaging, the truly charitable protection, which medical science so extensively affords to society against some of the severest of human calamities. It is only by such methods that the bulk of mankind can be brought to sacrifice that distaste to the prosecution of anatomical study, which results either from their instinct or their education. A sentiment of compassion for the imbecility that consigns so many of our fellow-beings to the tyranny of prejudice, will, we trust, be always sufficient to keep us in good temper with even the most active persecutors of Dissection.

The same principle of moderation shall govern every part of that system of remonstrance, by which we hope to expedite the approach of the day when the Profession to which we have the honour to belong shall be placed on a better footing than we find it. We deliberately believe that the coarse and violent importunity with which medical reform in this country has been insisted on for the last few years, has materially retarded the ap-

plication of a wise and efficient measure for the removal of all our grievances. Such being our resolution, we shall be content to appeal for proofs of our sincerity in making it, to the uniform conduct of this Periodical.

We beg to remind our readers, that there is appended to this Journal, over and above the contents of an ordinary weekly publication, the first portion of an important work now publishing at Paris. Medical men and students will see, therefore, that in subscribing for this Work, they are securing to themselves a body of professional information such as cannot be surpassed in any age of medical history. We wish it to be understood, that this altogether unexampled advantage is coupled with the contents of a Journal, which, independent of such addition, ought to sell for EIGHT PENCE, and that still our charge for the whole amounts only to SIX PENCE. Nothing, we assure our readers, will enable us to maintain a Periodical so conducted, but the most extensive patronage and support.

THE ANATOMY BILL.

WE have been favoured with a copy of the new bill for the legalization of the study of Anatomy in Great Britain, exclusive of Ireland. The provisions of this bill, as amended by the Committee of the House of Commons, are as follow :—

The Secretary of State for the Home Department is to appoint three inspectors for one year, the names of

the same to be published in the London Gazette.

One of these inspectors is to reside in London, and another at Edinburgh.

The three inspectors are empowered to visit and inspect, at any time, any place where Anatomy is carried on, on the production of a written order, signed by the Secretary of State.

The salaries of inspectors to be paid by the Lords of the Treasury, and to be £100 a-year each.

Any party having lawfully the custody of the body of any deceased person, and not being an undertaker, may, with the consent of the nearest relatives, permit the body of a deceased person to undergo anatomical examination, unless the deceased shall have expressed his desire, orally or in writing, in the presence of two or more witnesses, during the illness whereof he died, that his body after his death may not undergo such examination, or unless the surviving husband, or wife, or any known relative of the deceased, shall require the body to be interred without such examination. When any person directs his body to be anatomically examined, such examination is to take place, unless the husband, wife, or nearest relative object to the same.

The body is not to be removed without a certificate from the medical attendant, or from some medical practitioner, stating, to the best of his belief, the cause of death.

Graduates in medicine, surgeons, apothecaries, and students, are empowered to receive bodies for dissec-

tion ; every such person to receive the medical certificate, already mentioned, and make a return within twenty-four hours after the receipt of the body, to the district inspector, stating the day and hour, and from whom, the body was received, the date and place of death, the sex, christian and surname, age, and last place of abode of such person, and keep a copy of same.

No penalties to be incurred for dissection after this enactment, unless instituted by the Attorney General, or by leave from the Court of King's Bench ; and all actions to be commenced within six months, the defendant pleading specially, or the general issue of not guilty.

The act commanding the dissection of murderers to be repealed, but that the bodies of murderers be hung up in chains, or buried in the highways, as the Court shall order.

This act not to extend to Ireland, and to come into operation after the 1st of July next.

Such are the leading features of the Anatomy Bill, as it now exists ; but as it may be modified before it becomes a law, we decline inserting at length the draught of the bill, which lies before us. Should it become a part of the Statute-book, it shall be printed in full in our pages. We feel so deep an interest in the success of this measure, that we, in acknowledgment of the communication with which he has so kindly favoured us, transmitted to Mr. Warburton copies of the law of France and of the United States relative to Anatomy,

the latter of which he has referred to in Parliament. We also urged various objections to the clauses of the bill, the validity of which was acknowledged ; but in reply it was said, that the state of the public mind and of political feeling, rendered the suggested improvements totally impracticable at present. We feel deeply sensible of the great, the almost insurmountable difficulties which exist in this country to legislation on this subject ; and therefore the hostility of a certain portion of the medical press, and of a public professor of surgery, is unjust and ungrateful. As to the opposition of a certain portion of the public press, that is to be expected. Yet who are so loud in their abuse of Anatomical Teachers, as the conductors of newspapers ?—individuals who have accused our Profession of encouraging Burking ; and still, when a remedy is proposed, are the very first to condemn it. Some of them are so ignorant and stupid as to maintain that Anatomy is unnecessary ; or, in other words, that the complex and intricate microcosm of the human body is to be learned by inspiration.

We shall take the first opportunity to expose the utter absurdity of the objections of these seers, and to prove, to the entire satisfaction of the humblest comprehension, that the study of anatomy is not only indispensable to the best interests of every human being,—the preservation of health, which is above all treasure ; but that it is most particularly so to the poor, who cannot procure the best

medical aid, except from the eminent physicians and surgeons of public institutions.

REPORT OF CHOLERA.

Total number of cases in Eng-	
land and Scotland, from com-	
mencement of disease to Jan.	
27, 1832	2032
Total deaths from ditto . . .	652
Total number of cases remain-	
ing	239

The cholera has now extended in England to Sunderland, Newcastle, Gateshead, North and South Shields, Newburn, Haughton-le-Spring, Leamington, and various collieries and hamlets in the vicinity of Newcastle. In Scotland, it has extended to Haddington, seventeen miles; Tranent, nine miles; and Musselburgh, six miles east from Edinburgh. The deaths in England up to the 24th inst. are as 325 to 1: in Scotland as 32 to 1. The disease abates in severity as the season advances; but this is no reason why it should not prevail violently during the summer and autumn.

GREAT MEDICAL REFORM IN SCOTLAND.—PROSPECTS OF THE MEDICAL PROFESSION IN ENGLAND.

FROM our private sources of information we are enabled to lay before our readers, many weeks earlier than they could expect it from other channels, a parliamentary document, giving an account of the plan of Medical Reform

for Scotland, which has been recommended to the government by a commission authorized to investigate the state of the Universities in that country.

The royal commission here alluded to commenced its operations in 1826, and in 1831 it was renewed by his present Majesty. The manner in which the inquiry was conducted confers the highest honour on the commissioners; and the facts which they have collected, and the conclusions at which they have arrived, form a subject of interest, such as the medical profession in these countries has not been lately accustomed to contemplate. The following selections from the report of the commissioners, as just printed by authority of parliament, contain the principal recommendations; and as we have no doubt of these recommendations being adopted, we do not think that any commentary upon them is necessary. We shall return to this deeply important subject very speedily.

MEDICINE.

The Medical Department of education in the Universities of Scotland is evidently of the greatest importance. During a long period, a very large proportion of the persons who have practised medicine throughout that country, and who have occupied the medical stations in the army and navy, have been educated for their profession in one or other of these Universities. The Medical School of Edinburgh has indeed long possessed very high celebrity, and that of Glasgow has of late years risen into great eminence; and there is strong reason to believe that this branch of academical instruction may soon attain an important rank in the University of Aberdeen.—p. 55.

After full consideration of the subject of preliminary education, and referring to the whole evidence relating to it, we have come to the resolution that a certain preliminary education in Literature and Philosophy ought to be required of all candidates for the Degree of Doctor in Medicine. We do not, however, propose to require that they shall have gone through the Curriculum of Arts in the University, but only that they shall, at the time of being taken on trial for the Degree, possess the information which the regulation prescribes.

We have resolved accordingly, "That the general attainments of Candidates for the Degree of Doctor in Medicine should embrace a competent knowledge in Latin, Greek, Mathematics and Natural Philosophy, and that this knowledge should be ascertained by examination, to be conducted by the examiners for Degrees in Arts, in such works as shall be fixed by the Faculty of Arts, which examination must take place previously to the examination for the Medical Degree, except in the cases where the Candidates have the Degree of Bachelor of Arts.—p. 57. 58.

After a careful consideration, and after deliberating fully upon the valuable evidence which we have received in regard to the subject of the Medical Curriculum, we have framed the following course of study to be observed by Candidates for the Medical Degree, in whichever of the Universities that Degree may be taken.

1st YEAR.

Winter.—Anatomy, Chemistry, Materia Medica.

Summer.—Practical Chemistry, and Practical Pharmacy, which may be taken with a Private Teacher, or Lecturer.

2d YEAR.

Winter.—Anatomy, Practice of Medicine, Theory of Medicine.

Summer.—Clinical Medicine, and attendance on such Hospitals as the Medical Faculty may deem sufficient.

3d YEAR.

Winter.—Surgery, Midwifery, and either Clinical Surgery or Clinical Medicine, or attendance on the ordinary Physicians of the Infirmary, when there is no Professor of Clinical Medicine or Surgery giving Lectures in the Infirmary.

Summer.—Clinical Surgery or Clinical Medicine, in such Hospitals as the Medical Faculty may deem sufficient.

4th YEAR.

Winter.—Practice of Medicine, Infirmary, Clinical Medicine.

One Course of Practical Anatomy, in either of the last three Winters; one Course in the second or third Summer.

Two Courses of Clinical Medicine, and one of Clinical Surgery, to be required. The other Clinical Course may be either Clinical Medicine or Surgery, as the Student may prefer.

Botany to be attended in the University during any Summer of the Course.

The Commissioners recommend attendance upon a course of Clinical Midwifery; and upon the three following Classes in the University, viz. Natural History, Medical Jurisprudence, and Military Surgery, which may be attended during any period of the course after the first year, and a second course of Chemistry in the University.

That if from bad health, or any other particular reason, a Student should find himself precluded from attending any class in the above order, he may apply to the Senatus Academicus, who, if satisfied with the reason specified, may dispense with his attending that class in the prescribed year, and permit him to attend it in one of the subsequent years.

That in order to entitle attendance with a private Teacher or Lecturer to be taken into account, such Lecturers must adapt their system of instruction, and the length of the course, to the regulations of the University; must adopt a form of certificate to be

prescribed by the Senatus of each University, and must report themselves to the Senatus as intending so to do; and when irregularities occur, it shall be in the power of the Medical Faculty to report the same to the Senatus, as a ground on which the latter may hold the attendance of such private Teacher or Lecturer not to be adequate.

We propose that the Winter Session shall be six months in length, and the Summer Session four months.—p. 59 and 60.

We are farther of opinion, that Degrees ought not to be granted to persons who are under the age of twenty-one years.

It may be here proper to notice, that it has appeared to us to be essentially necessary that Degrees in Medicine should not be conferred by any of the Universities in which there is not a certain proportion of medical classes regularly taught. A Degree in Medicine cannot be considered merely in the light of an honorary distinction; and for the reasons already adverted to, it appears to us that it is most inexpedient that the Degree, which confers a right to practise, should be granted by any University in which there is not an adequate number of Medical Professors.—p. 64.

In regard to the nature of the Examinations for Degrees in Medicine, which were originally conducted in Latin, the practice has recently been introduced of examining in English. We are of opinion that this change is beneficial. We have already explained the provision by which we have endeavoured to secure an adequate knowledge of Classical Literature, and that object being otherwise provided for, we apprehend that an Examination in English is better calculated for ascertaining thoroughly whether the Candidate has that knowledge of the various branches of the science of medicine which he ought to possess.

We have therefore adopted the fol-

lowing Resolution:—"That the Examination of Candidates for the Medical Degree should be in the English language, and that Candidates for that Degree should not be obliged to prepare or print a Thesis; but that they should have permission to do so in whatever language they may select; that the Medical Professors should be the Examiners of Candidates for that degree; that the fees paid for obtaining it should be collected into a fund, out of which a fixed salary or remuneration shall be given to the Medical Examiners under the authority of the University Court; that no Medical Degree should be granted to a person under twenty-one years of age; and that no Medical Degree shall be conferred by any University where there are not Professors teaching the several classes, of one or more of the years of the Curriculum."—p. 65.

A Treatise on the Diseases of the Heart and Great Vessels, comprising a new View of the Physiology of the Heart's Action, according to which the physical signs are explained. By J. HOPE, M.D. senior physician to the St. Mary-le-bone Infirmary, formerly house physician and house surgeon to the Royal Infirmary of Edinburgh, &c. Svo. pp. 612. London, 1832. W. Kidd.

The vast importance of this truly valuable work induces us to offer a brief notice of its merits in our first number, in order to place the name of its learned and experienced author in association with those of the highly distinguished individuals, the results of whose experience we now submit to our readers, with the intent, however, of reviewing the work fully in an early number.

The claims which this production has upon the profession are irresistible, and these are, new, instructive, and most valuable information upon the physiology, pathology, and treatment of the diseases of the heart and blood-vessels. We heartily congratu-

tulate the author on the complete success with which he has so ably executed his difficult undertaking. He has produced a work of reference and authority which must have a place in every medical library. After having fairly acknowledged the respective claims of Corvisart, Kreysig, Burns, Laennec, and Bertin, he clearly proves, that much more evidence is wanted to elucidate the nature and proper treatment of the diseases under notice. To supply a part of this evidence, he performed a series of experiments before a number of the distinguished physiologists and pathologists of this metropolis, which enabled him to explain the physical signs of diseases of the heart. He disproves some of the opinions of the illustrious Laennec, to whom he justly offers the high eulogy to which that great physician is so eminently entitled. He communicates the long-wished-for information, the correct diagnosis, and the effectual treatment of cardiac diseases. He affords abundant evidence of the curability of these maladies, when recognisable, as they now are, in their incipient stages. He states, on the grounds of incontestable experience, that in their early stages, they are, in a large proportion of instances, susceptible of a perfect cure; and in general may be so far counteracted as not materially, and sometimes not at all, to curtail the existence of the patient. Such are the *direct* practical improvements to be expected from a better knowledge of diseases of the heart. These are vast improvements indeed; but there are collateral ones of no less magnitude. These are exemplified by the frequency of apoplexy and palsy, in alliance with hypertrophy of the heart; which, if overlooked, may lead to fatal results. An inattentive or injudicious observer may suppose that in all cases an apoplectic tendency is to be removed by active exercise, which will suddenly produce the disease which it was intended to remove. Again, organic disease of the heart is

said to be caused by dyspepsia; "good air and plenty of exercise are remedies;" and apoplexy the consequence. As the incipient disease of the heart might be removed, the recovery was regarded, by those who assumed this class of diseases to be incurable, as a proof that the malady was merely dyspeptic. Hence dyspepsia was said to cause disease in the head, which was really caused by disease in the heart. The converse of this error is, in mistaking nervous or dyspeptic palpitation for disease of the heart. "The frequency of cases of this kind," says Dr. Hope, "especially amongst men of studious habits (and more particularly, I have noticed among those of my own profession), is truly surprising; and, as it has always been considered difficult, and by many impossible, to distinguish the two affections, the alarm created is sometimes distressing." The author assures us that the discrimination may be made with ease and certainty, and has given a separate article on the subject.

He next observes, that an immense number of asthmas and of universal dropsies result from disease of the heart. "If the cause be overlooked, the asthmatic is harrassed with a farago of inappropriate and unavailing, not to say pernicious remedies; and the hydropic is treated with dangerous activity for imaginary affections of the liver, the lungs, or the kidneys." On the other hand, if the cause be detected in the incipient stage by precautionary measures, both the one effect and the other may in general be prevented. The judicious and talented author next adverts to carditis and peri-carditis, induced by metastasis of rheumatism; and informs us also, that disease of the heart, accompanied with obstruction of the circulation for any considerable period, produces enlarged liver, and its ordinary consequence, abdominal dropsy. Yet the treatment is solely directed to the liver, and not to the heart. Persons affected with cardiac disease, are extremely liable to rapid and destructive

inflammation of the lungs. If copious and repeated venesection is employed the patient sinks suddenly. The characters of the pulse may be deceptive, and fevers or inflammation from diseases of the heart, and blood-letting may be carried too far, or not far enough. In fine, there is scarcely an affection with which diseases of the heart may not be interwoven. Such then are the vacuities left by preceding writers; and such the advantages to be anticipated from their being supplied. The author describes the arrangement which he adopts, which is extremely correct and accurate. He selected his cases from the Hospitals; and he invariably recorded his opinions and diagnoses before the death of the patients, which were astonishingly correct. These are attested in some cases by the signatures of the medical officers of various Hospitals in London, Edinburgh, Paris, and Rome. The accuracy of Dr. Hope's opinions on the nature of the most opposite diseases of the heart were invariably attested by dissection. He is uncommonly well versed in the diagnoses and treatment of diseases of this organ; and will be consulted in such cases with the greatest advantage, both by the profession and the public.

On the Portable Sudatory or Hot Air Bath, with Cases illustrative of its Medical Powers in various Diseases, and its utility in Cholera; with Directions for its administration; together with Remarks on the applicability of Galvanism in the first stage of that Malady.—By M. LE BEAUME, Medical Galvanist and Electrician in Ordinary to the King. 12mo. pp. 84. London, 1832.—Highley.

THIS is an exceedingly instructive essay, containing the most satisfactory and conclusive evidence of the efficacy of hot air to the surface of the

body in the state of collapse in cholera, typhus, scarlatina, and numerous other diseases in which the vital powers are greatly depressed. We have examined Mr. Le Beaume's apparatus, which is applicable to the whole or any part of the body. In cases of rheumatism or paralysis of particular parts, it can be applied with facility. We strongly recommend this cheap and really useful production to our readers.

ON THE INFLUENCE OF THE NERVES
OVER MUSCULAR CONTRACTILITY.



To the Editors of the Medical and Surgical Journal.

GENTLEMEN,

I shall feel much obliged by the insertion in your valuable Journal of the following observations, if you should consider them worthy:—

Physiologists, I believe, consider the contractility possessed by muscular fibre to be an inherent property; they suppose likewise this property to be under the regulation of the nerves, and that their influence disposes to contraction. Dr. Mason Good says, the nervous influence is continually being communicated *in jets*. There are several objections which may be urged against this view of the influence of the nerves.

If nervous influence is continually being sent into a muscle, it must either give rise to constant contraction, or it must accumulate there.

It seems strange, that an additional quantity of the self-same influence that predisposes to contraction should be required in order to produce actual contraction. The theory, in fact, supposes an inherent disposition to contract in the muscular fibre itself, a continual exciting cause in the efflux of nervous influence; and still contraction does not take place, unless further excitement is furnished by a sudden additional charge of nervous

power.—What an accumulation of causes is here !

How can we, according to this theory, reconcile the anomaly of spasmodic action taking place, when we have evidence of nervous debility co-existing ?

It is a fact, that our best antispasmodics are direct or indirect stimulants to the nervous system ;—e. g. aether. If muscular contraction depend on sudden increased nervous influence, then stimulants would increase the disorder they are intended to remove.

How can an animal relax those muscles which are without antagonists, if every property of the muscle itself, and every influence added to it, be for the purpose of favouring contraction ?

In considering these objections, I have been led to imagine that the influence of the nerves over muscular fibre may be of a nature totally different to what is generally supposed. The opinion I have formed on the subject I now beg leave to offer to your consideration.

I will take advantage of the acknowledgment that muscular contractility is an inherent function—that it is the very nature of muscular fibre to shorten itself by contraction. I admit too, that this contractility is regulated by the nerves, and through their medium subjected to the influence of the will, or, as in the instance of involuntary muscles, of their proper stimuli.

I cannot allow that the influence which is present when the muscle is relaxed, is of the same nature as that which by a sudden influx causes contraction ; I suppose that the nervous influence which is present in relaxed muscular fibre, is the only influence which the nerves of volition possess over that tissue, that its office there is, to restrain or controul the tendency to contract which is inherent in the muscle, and that contraction can only take place when by an act of the will this influence is suspended, the muscle being then left to

act according to its own innate properties. Is it not more reasonable to suppose that the nerves occasionally suspend, than that they only occasionally exert their full influence ? And when we are told that muscles are ever ready to contract by virtue of a principle peculiarly their own, are we not to suppose that any influence imparted to them, is for the purpose of reining in this disposition to act, rather than that any additional power is necessary for the performance of an act, which experiments prove can go on without such additional power ?

The nervous influence, then, is imparted to muscular fibre, for the purpose of restraining its contraction ; and the action of the will, and of all other disposers to contraction, is simply to withdraw for awhile this influence, so as to allow the peculiar property of muscular fibre to shew itself. Sir Charles Bell has said, that when a muscle loses all governance of the nerves, the vis insita falls into partial and general convulsions. Surely then the nature of the governance here alluded to, must be to restrain contraction.

This restraining influence is not derived from the brain ; it exists in the extremities of the nerves, even after they are detached from the brain ; their connection with this organ is, to admit of the transmission of volition along the media of connection, the nervous trunks. Thus, a muscle detached from the body will contract, but only when particular applications suspend the restraining nervous influence which exists for some time after death. In proof of this, I may observe, that though certain sedatives applied to a portion of a nerve, prevent the extremities of that nerve being acted on by a power applied above the seat of the injury, yet they are readily acted on by a power applied below it ; so that division of a nerve produces paralysis by interrupting the communication of volition, not by having its influence on the muscular fibre positively destroyed.

According to the theory here attempted to be explained, we have a beautiful provision for contraction, in the innate and independent property of the muscle itself, and another, equally beautiful, to enforce relaxation, in the nervous influence which is superadded to it: thus we are enabled to account for the active dilatation of the auricles of the heart; the blood in the heart causes the nerves to suspend their influence, the muscular parietes of the heart contract, and expel the blood; the nerves are now at liberty to resume their functions, the muscle relaxes from its contraction, and is compelled to an active state of diastole, and the blood again rushes in to supply the vacuum which would otherwise be produced.

Perhaps the phenomena of secretion may be accounted for in the following manner:—It has been asserted, that the capillary arteries are furnished along their sides with innumerable foramina, each foramen being provided with a sphincter muscle. Is it not probable that these sphincters are furnished with motory nerves, which are incapable of being acted on except by peculiar substances? When, therefore, the matter of the various secretions which is combined with the circulating fluid, comes in contact with the nerves of these little sphincters, they are thereby stimulated to exert their power in producing relaxation, so as to admit that which it is their function to separate from the blood.* Any substance in the blood, which is not of the exact nature of the required secretion, exerts an opposite action on these nerves, causing them to suspend

their functions, so as to permit contraction of the sphincters, for the exclusion of foreign substances. The action of the lacteals in separating chyle from the contents of the intestines, of the pyloric orifice of the stomach, and of the epiglottis, may be accounted for in the same manner.

I may add another reason which has induced me to adopt this theory, and that is, what is called the tonic contraction of a muscle, as instanced in the stiffened corpse; this I suppose to be nothing more than an uniform exertion of the power of muscular contractility, which takes place over the whole body, when the nervous influence is totally lost, and lasts until the property of contractility is destroyed in the muscles themselves; for the muscles retain their functions longer than the nerves. We find this stiffness comes on gradually, and that is because the nerves lose their power of restraining contraction by degrees.

The nervous system, in well regulated constitutions, is kept in full possession of its properties by the ordinary nutriment of the body; but there are substances which peculiarly excite and increase the power of the nerves, such as spirituous liquors of all kinds, and which, after being persevered in for some time, become absolutely necessary to keep the nerves in full tone; these substances may then be called the *food* of the nerves. After a short abstinence from this food of the nerves, the habitual drunkard is unable to regulate the action of his muscles until his nerves are supplied with the peculiar stimulus for which he has caused them to acquire a morbid appetite, and a morbid necessity. The convulsive twitchings of the muscles in delirium tremens, are evidences of an imperfect supply of the nervous restraining influence, and the cause of this is abstinence from their accustomed, and, consequently, necessary food. The most obvious way to relieve this condition, is to break this fast of the nerves, that those properties may be

* It may be objected, that unless their sphincters possessed the power of chemically decomposing the blood, they could not separate fluids which are combined with it;—but it must be evident, that even mechanical division of a compound substance cannot proceed beyond a certain extent, without eventually separating its component parts by dividing it into its ultimate *simple* atoms.

restored, which the ordinary nutriment of the body has been rendered incapable of supporting.

I am, Gentlemen,

Your very obedient servant,

R. UVEDALE WEST.

Jan. 18th, 1832.

Hospital Reports.

ST. BARTHOLOMEW'S HOSPITAL.

Case of Strangulated Inguinal Hernia, in a Patient labouring under Chronic Arachnitis.—On the morning of the 22d January, about five o'clock, Henry Taylor, æt. 45, was brought to this Hospital, when it was found, after the usual examination, that he was affected with inguinal hernia. The tumour was exceedingly tense—indeed so much so as to preclude all hope of reduction by the taxis. The usual means, of course, were employed for that purpose; the warm bath, venesection, ice, and tobacco glysters. Mr. Lawrence saw the patient at an early hour, and deeming the operation to be indispensable, he recommended the patient to permit it to be done without delay. But the latter refused, observing, that when a similar tumour appeared in the same place before, he was fully able to reduce it himself. At half past twelve o'clock, Mr. Lawrence visited the ward again, and finding that pain began to be felt about the lower part of the abdomen, he urged the immediate performance of the operation, and succeeded.

After the sac had been cut into, the convolution of small intestine which presented, might measure from five to seven inches. Its appearance was generally of a favourable nature, except that it was somewhat preternaturally reddened. In consequence of the employment of a very small and shallow director, which proved quite insufficient for the necessary degree of protection to the surrounding parts,

the division of the stricture was attended by a wound of the intestine. A yellowish watery fluid flowed out; resembling the morbid secretion from the serous membrane of the abdomen, and might be easily accounted for by referring to the state of irritation produced by the hernia; but the secretion, as afterwards appeared, came from the mucous membrane of the intestines. A ligature was tied round the wound, and the intestine was returned to the abdomen. After its disappearance, the operator seemed surprized at finding *behind* the situation of the protruded intestine, a large mass of omentum, which was attached by very firm adhesions to the posterior surface of the sac. The ordinary state of entero-epiplocele is—the omentum anterior to the bowel; and Mr. Lawrence had no recollection of having met with such a case as this before. A considerable portion of the omentum was removed; and the vessels being very large, gave out a copious discharge of blood, and a considerable number were tied. The patient was then put to bed, and allowed to remain quiet for two or three hours, after which he took compound colocyath pill and sulphate of magnesia, at repeated intervals; but without effect. The pain in the abdomen increased in the course of the evening; Leeches were applied in abundance, and purgatives repeated, but no motion, except the watery secretion already mentioned, followed. Next morning, he complained of great weakness; the pulse was low, and the surface of the body rather cold. Cordials and stimulants were employed without effect, and the patient died about one o'clock in the afternoon of the 23d, just twenty-four hours after the operation.

Autopsic Examination.—The appearance of the membrane lining the cavity of the abdomen was generally healthy, but on the side where the hernia occurred there was a slight increase of redness on the convolution of the intestines. The state of

the omentum excited particular attention. It was seen stretching from its attachment to the stomach, and the transverse arch of the colon downwards to the abdominal ring, where, as we have said, it was again firmly secured by old adhesions. The intestines lying in this interval appeared to suffer a considerable compression, for the omentum made an indentation upon them in its course. Mr. Lawrence at once observed that this relation of the intestines and omentum could not possibly have subsisted from the commencement of the adhesion of the latter to the back of the sac, and that the tense state of the omentum, which was so conspicuous, must be of recent production, and could only be ascribed to the sudden distention of the bowels. The result of the pressure was curious: the colon, at the point of its attachment to the omentum, was constricted, and so reduced in its diameter as to oppose an impediment to the passage of the fecal matter. The convulsion of intestine which had been protruded into the hernial sac was somewhat inflamed; it presented spots of vascularity and of ecchymosis, and was agglutinated to another portion of intestine, not, however, so as to offer the slightest obstacle to the continuation of the ordinary functions of the bowel. The wounded part was completely concealed from sight, as was every portion of the ligature, by a copious effusion of lymph. It was a beautiful specimen of the initiatory process of nature to repair injury, and there could have been no doubt that the ligature would ultimately have been passed off through the alimentary canal, if life had not been extinguished from other causes. The brain was examined, but no anticipation of a morbid condition had been previously entertained by any person. Mr. Lawrence, indeed, stated that he wished to see the contents of the cranium only to have an opportunity of contemplating the appearance which a healthy brain would present. The actual state of the brain and its mem-

branes, when the examination was made, was a subject of surprise to all present. Upon the calvarium being removed, the vessels on the surface of the dura mater seemed numerous and dilated, and the blood flowed in some quantity when it was cut. The arachnoid membrane was remarkably thick and opaque, and gave a dilute milky appearance to the convex surface of the brain. A copious serous infiltration into the pia mater had also taken place; so that when the dura mater was removed, the two hemispheres appeared as if they had been covered with a layer of thick jelly, or (with reference to the colour and consistency) of blanc-mange. Yet during the time that the man was in the Hospital, he exhibited no symptom whatever of confusion of intellect to lead to the suspicion that such preternatural changes existed in his brain. It was mentioned in the dead-house by one of the gentlemen present, who minutely inquired into the history of the patient, that he had had a paralytic attack in the *left* arm. The *right* side of the brain was accordingly minutely examined, when upwards of three ounces of a very pellucid fluid were found in the right lateral ventricle. The right corpus striatum had lost its colour; it was light brown, and in a flaccid state, and on continuing the examination, the adjacent structure was found to have experienced a similar change. Mr. Lawrence had no doubt that this alteration was produced by the effect of an effusion of blood into the corpus. The blood was absorbed, and the same result followed as takes place from the same causes in other parts of the body.

Mortification of the Toes from Cold.

Richard Wilson, a boy about 16 years of age, was admitted into the Hospital on the 26th ult. on account of mortification of the toes of the right foot, under the care of Mr. Earle. The poor boy appears to be half idiotic; and therefore the account which he gave of the cause of his

complaint could not be relied on. But the persons who brought him to the Hospital stated that he was found in a most distressing condition, and that the disease under which he laboured was produced by continued exposure to the inclemency of the weather. On a close examination of the boy, after he had been placed in bed, there were found black patches over numerous parts of the body, which could not readily be referred to any other cause than great violence. Inquiries were instituted, and there is reason to believe that the marks about the boy were the results of the sort of chastisement which was inflicted upon him in a workhouse, of which it appears he had been an inmate for some time, but from which he had at last made his escape.

One of the toes nearly dropped off on the morning of the 28th ult., and there is some danger of the remaining ones.

GUY'S HOSPITAL.

Hydriodate of Potass in Scirrhus Uteri.

MR. ASHWELL has tried and is still trying the hydriodate of potass, in the form of suppository in scirrhus uteri, in the obstetrical wards of Guy's Hospital. His formula is composed of 2 or 3 grains of the hydriodate, and 6 of extract of hyosciamus, introduced into the rectum every night. The most decided improvement has been effected in six well marked cases, by this remedy. The general health was of course attended to by mild aperients and tonics. The facts proved by this report are in direct opposition to the experience of Dr. Elliotson, who proclaims to the world that hydriodate of potass may be given in drachm doses, and is merely a diuretic.

(Mr. M. D. Darwin, of Bedford Street, has lately read a paper on the causes of deafness, and on diseases of the ear, at the Medico-Chirurgical Society of the Medical School, at the Westminster Dispensary; in

which he detailed several cases of deafness, caused by an impervious state of the eustachian tube, in which a perfect cure was effected by iodine, given in the form of tincture, according to the formula of Dr. Manson, of Nottingham. The medicine was given in water, and not as draughts, which accords with the recommendation of M. Lugol, who states the tincture will be decomposed in a short time, if mixed with water. We can bear our testimony in attestation of Mr. D.'s success in treating diseases of the ear, and of his high attainments as a surgeon.)

Rheumatitis.

Richard Daniell, æt. 28, a waiter, admitted under Dr. Cholmeley, Dec. 14, 1831.

Is of a pale complexion, delicate constitution, and of an irritable nervous habit. States that he is married, and has lived regularly, but from his occupation has been much exposed to changes of temperature. His present illness commenced seven days ago, with pains in the knees, hips, and elbows, accompanied by great difficulty of breathing. He was bled and blistered, and had some medicine, which relieved his respiration. He says that he had typhus when nine years old, since which period he has been subject to palpitation of the heart. The right wrist is inflamed and swollen, tongue coated with a yellowish fur, bowels not opened; since yesterday, skin moderately warm; pulse 105, sharp and hard; urine light coloured; has had a slight attack of rheumatism about four years ago.

V.S. ad 3xij. Submur. hyd. gr. iv. Pil. antim. opiat. fort. h. s. Jalap. Ammon. acet. c. vini antim. m. xxx. 4tis horis.

15th.—Feels somewhat better, bleeding produced great faintness, no sleep during the night, owing to severe pains in the stomach (supposed to be caused by the mixture).

The pain is less this morning, but is increased when the medicine is taken. Tongue moist and nearly clean. No thirst, bowels opened twice, dejections loose, and yellow, and afford relief. The most painful joint is the left wrist, which has become affected since his admission; pains of the other joints much diminished; pulse 105, full, hard, and bounding; urine high-coloured, and turbid; blood drawn yesterday considerably cupped, and buffed. Jalap and magnesia were administered, and the pills continued.

16th.—Much better, slept well, slight dejection. Ordered this morning a dose of house physic; tongue moist and nearly clean; no sickness; pulse 108, rather soft; skin moist, but hot; complains of very little pain in the joints. Pil. ant. opiat. fort. c. cal. gr. ij. omni nocte.—*Pergat.*

17th.—He is much better, the most painful joints are the fingers and toes; bowels once copiously opened; pulse 108, full; skin rather hot; no thirst; urine high-coloured and turbid.—*Pergat.*

18th.—Improving; tongue cleaner; little pain in any of the joints; pulse 108, full, and rather incompressible; he felt a slight spasmodic pain in the right hypochondrium this morning, which was relieved by taking warm water; bowels freely opened, and offensive.—*Pergat-haustus statim sumendus.*

19th.—Says he is better; bowels regular; urine high-coloured, and turbid; slept pretty well, no perspiration; tongue dry, the centre coated with a yellow fur; pulse 144, sharp. Calomel gr. j, c. Pulv. Doveri gr. iiij. hora somni.—*Pergat.*

20th.—Continues to improve; great pain in the left knee and hands; tongue improved; bowels opened once yesterday; pulse 96; no thirst; appetite much better.—*Pergat.*

21st.—Still considerable pain in the shoulders, arms, and hands; slept well during the night; bowels once opened; pulse 90, full.—*Pergat.*

22d.—Feels rather better, but suffered more pains in the night in his left hand and wrist; tongue coated, with a yellow fur; troubled during the night with flatulence; pulse 108, sharp. Hirudines parti dolenti, Decoct. Cinchon. c. Iod. Syrup. Aurant. et Tinct. Ejusdem aa; 3js, 4tis horis.—*Pergat.*

23d.—Improving.—*Pergat.*

24th.—Better; pulse 90, and soft; bowels opened, not freely; appetite good. To take milk and arrowroot.—*Pergat.*

25th.—Great pain in the right hand and knee, in other respects better; bowels open, dejections unnatural and offensive; tongue nearly clean; pulse 72.—*Pergat.*

26th.—Troubled with great pains last night in both arms and hands, but is better this morning; tongue as yesterday; pulse 92; bowels not opened; ordered a dose of castor-oil.—*Pergat.*

27th.—Much better, less pains in the arms and wrists; bowels twice opened; slept well; pulse 96, small; tongue clean.—*Pergat.*

28th.—Better.—*Pergat.*

Jan. 1st, 1832.—Continues improving; middle diet.—*Pergat.*

3d.—Sleeps well; bowels opened once; tongue clean; pulse 96, rather sharp.—*Pergat.*

17th.—Dismissed, perfectly cured.

ST. GEORGE'S HOSPITAL.

Iodine in Ovarian Diseases.

DR. SEYMOUR is now employing iodine in diseases of the ovaries, with manifest advantage. The diminution of ovarian tumours is most remarkable.

MIDDLESEX HOSPITAL.

Iodine in Cancer of the Face.

SEVERAL cases of cancer of the face are being treated with iodine, by Professor Mayo, at the recommendation of M. Magendie, which was given when that distinguished physiologist was on his way to Sunderland. The

most decided improvement has been derived from this mode of treatment. The following is the formula of this Hospital:—

℞ Iodinæ ʒss.
 Potas. Hydriod. ʒijss.
 Aquæ destil. ʒviij.
 m̄ sit mistura, cujus capiat m. x.
 ad xxx ter dedie.

We hope to detail the results of these cases.

Cholera—new Mode of Treatment.

DR. MURRAY, of Dublin, whose work "On Heat and Humidity" has proved him to be a physician of no ordinary acquirements, has favoured us with a copy of a letter, addressed to Dr. Fergusson, who was lately appointed by the Irish government to investigate the nature of cholera at Sunderland, Newcastle, &c. which contains some curious original views, well worthy of consideration. It will be seen by the date of the letter, that the administration of ammonia by the lungs, and skin, and especially over the spine and epigastrium, is an original proposition. Ammonia has been given by the mouth, since the following letter was written. Dr. Murray has termed it a new and cheap atmospheric blister, in his work already referred to, and which was published in 1829.

[Copy of a letter to Dr. Fergusson.]

Dublin, January 3d, 1832.

Sir,—At this moment of dismay, I think it my duty to explain more fully the opinion I have already mentioned to you, that whatever the remote cause of cholera may be, the proximate one seems very similar to those which would arise from the evolution of cyanogen in the solids and fluids of our system.

The cold, black, and clotted blood, the progress of the malady, and the motion of the muscles after death, all appear like the effect of prussic acid, formed and circulated through the

frame. Some latent influence seems to produce derangement in the natural combination of the ultimate elements of our bodies, and to dispose them to combine in new and untoward proportionals, incompatible with the laws of life, or a state of health. As mentioned in my Treatise on Health it seems that the deleterious cause has the power to break up the healthy principles composing our blood and tissues, and to make them join in the altered and disordered atomic proportions constituting the basis of poisonous prussiates.

When therefore some of the proximate principles of our constitution are decomposed, the alternate elements which had formed them may produce new results when acted upon by some occult agency. Thus the carbon and nitrogen may be disposed to combine in proportions calculated to form prussic acid or its basis; and the oxygen and hydrogen then set free would constitute water, which fluid (as pointed out in my treatise) would account for the blackness of the blood.

I have already mentioned to you, that if nascent prussic acid pervade the human system or cavities of the body during this Asiatic epidemic, an atmosphere of ammonia diffused through the air of the apartment so as to be easily respirable, might be a manageable, economical, and beneficial antidote.

The generation of ammonia in sick rooms would maintain and convey uniform heat to the patient, and being imbibed in hot vapour of water by the skin and lungs, might counteract the further evolution of disordered animal products.

As a mode of prevention, the air of suspected or infected chambers might be deprived of malignant miasmata by a proper impregnation of ammonia.

The mode of procedure detailed in my dissertation, page 272, would convey a continued warm vapour of ammonia and water around the patient

in bed, and also diffuse a sufficient quantity of volatile alkali through the air of the apartments.

After proper attention to the use of mustard and other emetics, then, ammoniated spirits *DULY DILUTED*, might be administered internally, and even per enemata, as useful adjuvants of treatment. I am the more anxious to draw attention to these suggestions, from the result of experiments similar to those mentioned in my work, page 160, showing the great changes effected on the blood by an atmosphere in which ammonia is diffused; I refer to the work alluded to, as containing observations on the influence of æriform remedies, the detail of which would now be tedious.

Having mentioned the substance of this letter to some of those connected with Government, I am advised to submit it to the consideration of the Board of Health at New-castle.

I also request you will give these suggestions the benefit of your investigation, during the series of experiments you are about to institute on the subject of morbid poisons.

I am, dear Sir,
Your's truly,
J. MURRAY.

Mr. Stanley.—We have by accident been enabled to inspect a magnificent present which has been given to this distinguished professor of anatomy, at St. Bartholomew's Hospital, by the Governors of that splendid institution. The present consists of a tray composed of massive silver, which is chased in the very richest style of luxurious ornament; and of two smaller *waiters* of the same metal, and decorated upon a similar scale. The tray presents in the middle of its surface, in beautifully-wrought engraving, the arms of the Hospital, intermingled with those of Mr. Stanley. On the waiters also his arms are engraved. The three pieces of plate

bear, in a conspicuous place, respectively, an inscription, signifying that each was given to Edward Stanley, Esq. F.R.S. by the Governors, as a testimony of the sense which they entertained of his ability and industry in directing and arranging their Museum.

BOOKS RECEIVED FOR REVIEW.

A Demonstration of the Nerves of the Human Body; founded on the Subjects of the Collegial Prizes for 1825 and 1828, adjudged by the Royal College of Surgeons. By Joseph Swan. This Part completes the Anatomy of the Sympathetic Nerve. Part III., containing the Cerebral Nerves, will be published in the ensuing spring. Price of Part I. 2l. 2s.

A Treatise on the Diseases of the Heart and Great Vessels. Comprising a new view of the Physiology of the Heart's Action. By J. Hope, M.D. Senior Physician to the St. Mary-lebone Infirmary, of London, formerly House Physician and House Surgeon to the Royal Infirmary of Edinburgh, &c. &c.

A Treatise on Physiology applied to Pathology. By F. J. V. Broussais, M.D. From the French, by John Bell, M.D. and R. La Roche, M.D.

History of Chronic Phlegmasiæ, or Inflammations, founded on Clinical Experience and Pathological Anatomy; exhibiting a view of the varieties of these Diseases, with their Treatment. By F. J. V. Broussais. From the French, by Isaac Hays, M.D., and R. Eglesfeld Griffith, M.D.

NOTICE TO CORRESPONDENTS.

Communications have been received from Dr. Murray, of Dublin, Dr. Hays, of Philadelphia, Dr. Copland, Dr. Gordon Smith, Dr. Crane, Dr. Bourne, of Coventry, Dr. Hacket, of Trinidad, Mr. Rolls, Mr. Myers, Mr. Boyle, and Mr. Henry, which are under consideration.

The Reports of the Medical Societies in our next.

THE

London Medical and Surgical Journal.

No. 2.

SATURDAY, FEBRUARY 11, 1832.

VOL. I.

SELECTIONS

FROM THE

CLINICAL LECTURES,

Delivered

BY WM. LAWRENCE, ESQ. F.R.S.

*At St. Bartholomew's Hospital, during the
Session 1831—1832.*

Application of Ice and of Tobacco Enema in Strangulated Hernia.

ICE, gentlemen, as it is commonly used—that is to say, pounded small, and put into a bladder, and then laid over the tumour, is as likely as any local application with which we are acquainted, to be servicable in irreducible hernia, whilst it is a resource which cannot produce any unfavourable consequences. It checks the progress of inflammation in the parts with which it is in contact: it causes a diminution in the size of the vessels—it lowers the temperature, and is, on the whole, an unobjectionable mode, certainly, of attempting to reduce a hernia. If it do no good, it will be sure to do no harm; and in effect accomplishes, without risk of danger, all that can be effected by any local application whatever.

Tobacco, gentlemen, you are aware is employed in the form of an enema, in cases of hernia, for a specific purpose; it causes, very speedily, a depression of the vital powers; it diminishes the energy, and brings on that state of general relaxation of the body under which inflammatory action is likely to give way. The influence of tobacco is indeed so considerable on our physical powers, that the greatest caution is requisite in its administration, even in the way that I have mentioned.* We generally infuse a drachm of

the tobacco in a pint of water. We inject half this quantity the first time, and if no particular effect take place in half an hour or so, we are then justified in administering the remainder in the same way.

Omental Hernia.

Gentlemen, rupture of the omentum renders persons very liable to the rupture of intestine. This liability I have had occasion to notice, and I remember very well that a gentleman, affected with omental hernia, and in whom the intestine would come down whenever he rode, or even when getting into bed, insisted on having an operation performed upon him. The operation was performed by Mr. Abernethy, during the time that I lived with him.

Wound of the Intestine in the Operation for Hernia.

Gentlemen, no person, I am sure, can have undertaken the difficult task of performing an operation for hernia, without feeling that he runs the risk of wounding the protruded bowel. It sometimes even happens that the surgeon is unable, for some time, to pass the director beneath the constriction, and having, under such circumstances, no other alternative than the employment of a cutting instrument, he incurs still greater risk than ever of such an accident. For my own part, gentlemen, I confess to you, that I never yet commenced the operation for reducing a strangulated hernia, without being sensibly alive to the danger of wounding the intestine. This is a sort of apprehension, from which no man, however cautious, however well-informed, should consider himself exempt, and it is only by acknowledging your

* Mr. Wheeler, the elder, late Apothecary to St. Bartholomew's Hospital, a gentleman now not far from his 80th year, and who exhibits in his healthy form, and his placid and cheerful spirit, a striking specimen of the blessings which a

youth, and a manhood of temperance and integrity, must secure to the period of old age, has been among the first to warn practitioners against the employment of tobacco clysters in hernia, of a strength greater than that which Mr. Lawrence recommends in his lecture.

liability to this danger, that you will be induced to take the necessary measures in order to avoid it.

You will naturally inquire what are the means by which we are most likely to prevent this occurrence.

I think, gentlemen, that one of your principal objects, with the view of guarding against the hazard I have mentioned, should be to carry your external incision so far, as completely to denude the aponeurosis of the external oblique muscle. By such a course only, can you expect to proceed to the successful termination of your measures with certainty. In the next place, let me advise you never to trust to a shallow director, when you are about to relax the constriction. I present to your notice a director, which I always employ in private practice; you perceive that the groove is rather deeper than you have been accustomed to see; but this depth is essentially necessary, in order to prevent the intestine from being reflected over its edges, and in this way being imperceptibly placed in the way of the knife.

Now, gentlemen, when such an occurrence as a wound of the intestine takes place, your best course is to seize, without delay, the sides of the aperture with a strong forceps—to tie the mouth of the wound with a silken ligature, and cut the ends of the ligature close to the knot. I may mention to you that such an accident as this has taken place in the practice of Mr. Abernethy, who tied the bowel in the way I have mentioned, and returned it.*

In a case, which was operated on by myself some years ago, there was an opening in the protruded intestine, which could not be decided to have been inflicted by the knife. But the wound was tied, and that patient did well. It is my own impression, that when the bowel is wounded in the operation, if, in other respects the case goes on favourably, there is no reason to apprehend any dangerous consequences. You will find that an effusion of lymph generally envelopes the ligature, and that it is carried into the canal of the intestine, from which it ultimately passes off. The process has been found to take place in dogs, which have been made the subjects of experiments; and I believe it has been proved, that if you even tie the intestine of one of these animals completely across, the obstruction will be soon removed, and the ligature will be carried into the canal—so extensive are the powers of nature.†

Difficulties of Post-Mortem Examinations.

There is scarcely any member of our profession who, if he were called on, is not ready

to undertake the examination of the body after death, quite as an ordinary part of his business; and yet how few are there who are really competent to the due performance of such a task. Few indeed are acquainted with all the changes which the structure of the body may experience under the various influence of disease; still fewer are capable of appreciating the distinctions that exist between the phenomena which belong to the condition of health and those which belong to the condition of disease. I am not, I must say, ashamed to confess, that I am not able, at all times, to estimate with certainty, the nature of the appearances which present themselves in the human body after death.

I have seen it stated, for instance, that the hemispheres of the brain have been coated with a stratum of lymph. I have known such a statement to be made by what one would be justified in considering as great authorities; but I must candidly inform you, that I have never seen lymph effused on the brain: that such an effusion may occur, I do not mean to deny, but such a thing as pus being poured out beneath the dura mater, is a circumstance that I will venture to say is, at all events, rare. Now in the majority of instances, where the appearance on the removal of the dura mater has been described to be purulent effusion, I have not the slightest doubt that this is nothing more than a serous infiltration into the pia mater, with which thickening and opacity of the arachnoid membrane are combined.

LECTURE

Delivered before the Fellows of the Medical-Botanical Society of London,

BY GILBERT T. BURNETT, ESQ.
Professor of Botany, King's College.

ON THE PROGRESS OF MEDICAL BOTANY.

GENTLEMEN,

Informed by your learned secretary, that it is the duty of the Professor of Botany to deliver a lecture introductory to the combined course which the Council have decided shall be given by his colleagues and himself, during each session, upon the botanical, chemical, pharmaceutical and toxicological characters, principles, and properties of such plants as either have been, are, or might be used as medicines or as poisons, and not as yet having had an opportunity of consulting the professors of chemistry, materia medica, and toxicology, as to the first subject to be discussed, he hopes he shall stand excused in selecting for the present occasion a general, rather than a special topic, viz. a review of the late progress of medical botany, including in this

* [This is also the practice of Sir Astley Cooper.—Eds.]

† [This was amply proved by B. Bell, Travers, and others. See Appendix, Article Abdomen.—Eds.]

a retrospective notice of the changes which have taken place in public opinion with regard to its absolute value and its relative importance.

Indeed, gentlemen, he has thought that a summary account of the advances and improvements which have been made in this science, since your society has been instituted, will not be considered an uninteresting detail by your new, nor an unwelcome offering by your older Fellows; the former of whom may have never known, and the latter, from the want of such a retrospect, may have in part forgotten, the improvements which have been wrought through the instrumentality of your society, and of other societies kindred with your own; a progress so remarkable, and a change so great, that they can only have arisen from the unwearied exertions of good soldiers, fighting in as good a cause.

Gentlemen—retrospects are pleasing when long sought objects have become our own, when labours which we feared would ever be in vain, not only have deserved, but have obtained success.

It is pleasant, I repeat, to look back from the vantage ground of successful enterprise, upon the arduous paths our feet have trod, and reflect that the once future hope of years now gone, has become the present possession of the time that is.

Such a view is grateful, even when arrived at its utmost verge—we have only to contemplate a scene we soon must quit—how doubly grateful when in early life we reach that point in the vista of our past and future years, whence on either side extends a prospect, here of achieved, there of anticipated good.

Such, gentlemen, is our lot, such the prospects now before us, and such the feelings with which I now address you; for not even the youngest here is too young to have seen many of the changes to which I have alluded, and we most of us have watched with fostering care the gradual rise in reputation of that department of natural knowledge, to which, as a society, our attention is especially directed. In truth, I know not the science which has advanced more rapidly, or which has made greater improvements than our own. Gentlemen, you are my witnesses, that a few years since, medical botany was not what it is, and that its reputation is not now what then it was. To us its present care has been committed, let us not prove unmindful of our charge, but urge on towards perfection, that which already has so far advanced, and strive to transmit with still greater improvements to our successors, that which so far improved is now inherited by us.

To some of the soldiers of science, victory must always come a day too late; but if the rewards be reaped by their survivors, who have followed in their footsteps, and have fought their fight, the honours must be given both to the living and the dead; and if then it be pleasant (as none can doubt) to cast our

eyes over the field of conflict, even when it is a field we have won to leave, how doubly pleasant to have arrived in time, to share both the hazards and the honours of the war, and to have still enough of strength remaining to secure the spoils, and life to enjoy the advantage we have gained.

Gentlemen, to render the following detail more specific, and to avoid assuming your authority even in appearance, before your sanction has been given, I shall speak at first as for myself alone—and yet it will not, in the end, be for myself—but for all, as I am sure my statements will be verified by your experience, and then you will adopt them as your own.

When, gentlemen, only fifteen years of age I became a student in the London schools, medical botany was at its lowest ebb—it had become almost a by-word of reproach, and the study entailed both on teacher and on pupil sarcasm and contempt, as if familiarity with his tools, which, as a workman, he must employ, could weaken the hand by which they must be used, or as if a knowledge of the means by which diseases may be cured, could enfeeble the mind, that should minister relief. Think not that I exaggerate—the above is no fancy sketch. Should any doubt, the following anecdote will prove that the picture is not too highly coloured; indeed, it is far from being over-wrought.

A venerable botanist, and excellent man, who is an ornament to our profession, and a most successful practitioner [if we calculate success by the relief administered, rather than by the lucre gained], was absolutely scoffed at in the wards of a London hospital, for his love of botany—publicly taunted, not for ignorance of anatomy, physiology, chemistry, or pharmacy—not for insufficient knowledge of the principles and practice of his profession—not for ignorance of any thing the scoffer knew, but for knowledge of that he knew not—for his knowledge of botany—laughed at (I repeat the memorable words), for “knowing a nettle under a hedge.” Such was the ‘head and front of his offending.’

This philosopher, indeed, was born, as it were, before his time; he was too much in advance of the age in which he lived to have his talents duly valued; for when amongst us such things were too little thought of, he added philosophy to physic, and both to great classical attainments.

To some now present both the gentlemen alluded to were personally known—by fame to all they are known, and their names are only withheld, because I am loath to offend the modesty of the illustrious living, or the memory of the illustrious dead. I tell the tale in pity, not in anger, accounting the error rather that of the age than of the individual. He had never studied the science he contemned, and was therefore incompetent to form an original opinion; his mouth but spake, his voice but echoed the prevailing prejudices of his

time, prejudices which have only lately been subdued, for many were the attacks made by the intelligent on the strong holds of ignorance, before medical education became established on its present enlarged and liberal basis. How often was the necessity of a knowledge of botany urged before its study was required; how often were the premises admitted, and the conclusion irrationally denied?

Such, gentlemen, was the state of medical botany when I commenced the study, and nearly such its state when I began to lecture; as things could not be worse, I adopted as my motto, "*Spero meliora*," and better things have come.

Various attempts had previously been made to establish a botanical class in the medical schools of London. Wheeler, Smith, Thornton, Emerson, and others, convinced of the importance of botany to physic, had successively essayed the task, but were severally compelled to relinquish the attempt, for, although they were willing to teach, not finding students willing to learn, they abandoned the project in despair.

Thus while botany in general, and out of the schools was advancing, botany, in the schools, and especially medical botany, receded almost to extinction.

The Society of Apothecaries seem almost alone to have kept the feeble spark alive by their herbarizings and garden demonstrations, but even in this last London refuge for the science, although the lectures were delivered gratuitously, and food provided for the body as well as for the mind, few comparatively were the students who would accept the proffered breakfast, dinner, and tea, which were to be associated with a medico-botanical demonstration, and even of the few that ate the viands, still fewer were there that listened to the lecture.

Thus the early fate of each succeeding lecturer resembled that of his predecessors, for even when the lectures were gratuitously given, woefully small was the class attending—sometimes the dual number was all too large for its enumeration, and often the lecturer was barely privileged to address his audience as gentlemen.

How great is the contrast now, for instead of your Professor being almost the only lecturer in London, at one time, I believe left quite alone, there is a botanical lecturer in almost every school; and still, notwithstanding the competition, the classes have been rapidly increasing, and the botanical courses are now esteemed among the most popular and numerously attended in our schools. So that a pupil in his noviciate might be well excused for doubting whether it could ever have been otherwise, and this the more especially, when he finds that even the first dawnings of the science bring to light many points of interest and importance, which had hitherto been shrouded in impenetrable obscurity. When

he finds, to take but a few isolated, and hence much weakened illustrations, when he finds that vegetable anatomy discloses the primordia of vital organization, exhibits the simple drafts or outlines of those afterwards elaborate systems, which in animals seem obscure from their connexions, and startling from their complexity. Yes, here are to be found the first out-shadowings of the muscular, digestive, nervous, and other systems, even before they have become such in reality; and those who are curious in these matters, may consult *Dutrochet's Treatise on the Motive Organs of the Sensitive Plant*, and also an account of some experiments performed by Mr. Mayo and myself, to show the nature of its contractile apparatus, published in the *Journal of Science*, as well as several essays of mine in the same Journal, "on the Adumbrations of a Stomach in Vegetables," on the digestion and respiration of plants, and on the development of their several organic systems.

Again; well might a freshman feel disposed to doubt the accuracy of our reminiscences, when he learns that vegetable physiology brings him acquainted with the various functions of automatic life in their most distinct and simple forms; when he finds that he can trace absorption through all its stages, and demonstrate the extraordinary power of endosmose, by which fluids permeate organic membranes, and are forced to rise in tubes and vessels, against the force of gravity; when he sees in plants the circulation of the sap, and its motion shown to exist, independent of an impelling heart; and also among many other privileges, he finds that he can, in plants, examine the actions of organic, separate from those of animal life; *i. e.* can investigate the phenomena of irritability unmixed with those of sense and instinct.

[*The various examples given by the Professor, want of space compels us to omit.*]

Well might a novice be incredulous with regard to the late neglect of botany by physiologists, when he finds that phytochymics will explain the influence of vegetable life on matter, the conversion through the agency of the growth of plants of inorganic into organic, the change of refuse into useful things.

Well might he disbelieve our record, when he learns that botanical geography will enable him to tell the mean and the extreme temperature of countries, and not only their temperatures, but their relative and their positive degrees of salubrity, by the presence or absence of various plants. Well might he indeed impugn our veracity, in saying that any one had ever declared such science useless, when botanical geology not only indicates the nature of various soils and strata, as unerringly as the rule of the mineralogist, or the crucible of the chemist; but when fossil botany unfolds a page turned down by nature, and reads to us the history of changes

long since forgotten, if indeed to man they were ever known.

Gentlemen, I have selected my illustrations of the utility of botany from the general, rather than from the medical departments of the science, and for two reasons: first, because I have previously discussed at some length the advantages of botany to medicine; and, secondly, because if medical botany has ever deserved reprobation, it has been from the tendency exhibited during the time this science was disgraced by being made a subordinate branch of *materia medica*, to confine the attention of the medical student merely to the diagnostic characters of plants, neglecting those more interesting and philosophic inquiries which alone constitute the study of plants *a science*, and distinguished modern *botany* from ancient *herbcraft*.

Unwillingly do I hint at, rather than describe, and still more reluctantly do I wholly omit many topics of importance, and yet am I compelled to the omission; for I should fatigue you, were I but barely to enumerate the various fruits which this lovely science bears profusely on every branch, and proffers freely to every uplifted hand. The more immediate utilities of botany I have not even named, for if the less practical points be deserving your attention, the more useful cannot be unworthy your regard. Such I mean as the diagnosis of plants, which is the province of systematic botany; and economic botany, which teaches to apply to useful purposes the plants which are thus distinguished, either as articles of diet, as medicines, or in the arts, and tells us how, by culture, to ameliorate our food, increase or regulate the power of our drugs, and insure for trade regular supplies of proper materials for many different uses.

These and other advantages of botany are so notorious, that I should have thought it a waste of words for them even to have been named, had they not been peremptorily denied, and bearing in mind that such as I have faintly indicated, is the real tenor and scope of botany, although much allowance must be made for the shortness and feebleness of the detail; such, I repeat, being the scope of the science, and such the points to which it has been progressively advancing, and to which it has now advanced, you will probably feel surprised to hear that the reproaches, which were manifestly unjust, when preferred against it formerly, have been lately reiterated, and that by an annalist, pretending to sketch physic and its professors truly as they now exist.

These papers containing this attack are too curious to be allowed to drop wholly into oblivion; they are perhaps the last efforts of that expiring prejudice, which even now is not quite extinct, and as such, I shall beg your permission to make some extracts; they will require but little comment for their refutation.

"Botany," says this veracious historian,

"Botany is in a declining state," (and all whose notable advances to which I have cursorily alluded, are represented as symptoms of this decline; for he continues,) "Botany has indeed been growing up of late; but it is with a sickly wild luxuriance, the common precursor of premature decay; and the time is not very far distant when it will have completely dropped off, as a useless branch of medical education."

A prophecy, as you will perceive, not yet fulfilled, nor under the present aspect of affairs, very likely to be accomplished.

But to our extracts.

"How it could have so long contrived to occupy a place, and a prominent place too, among those branches of knowledge, deemed indispensable to the physician, can only be explained by the fortuitous arrangement of circumstances."

Chance is a very unphilosophic cause for any thing; and we who understand the true value of botany, can easily comprehend the cause of its being made an indispensable study to the physician. But I will conclude the extracts without further comment. The writer thus continues,

"There is certainly no sort of knowledge, however humble, that does not possess some little share of intrinsic importance; and it is in this respect only that botany can be deemed worthy of a certain degree of consideration." * * * *

"That it is of the least possible use to the physician, in the practice of his profession, I am strongly inclined to deny. No doubt the extensive knowledge requisite for completing the education of the accomplished physician, should embrace this branch of natural history also, but for the purposes of the healing art, botany is positively worse than useless." And a little further on,

"Concerning the medicinal efficacy of plants, botany teaches us nothing."

"Again; it may be observed, that most other sciences tend to develop the faculties, imparting a comprehensive and expanding influence; but botany, numerous instances show, has a tendency quite of an opposite character.

"By fixing the attention upon minute objects and considerations, it contracts the intellectual as well as moral qualities." * * *

"Further, it may be stated as an authenticated fact, that few great men have been distinguished as botanists merely; those who have ever obtained a character in this way, were such as would have been as great in the path of celestial mechanics, had they turned their attention to that study. We cannot forget the multifarious talents and pursuits of Linnæus and of Haller. Haller, like Rousseau, studied botany merely as a recreation; and indeed, Rousseau himself was as much an enthusiast upon this as upon many other subjects *equally useless*."

The above are but parts of the virulent

attack to which I have alluded, and which is summoned up with the following affirmation, that, "although he is aware these remarks *must prove rather unpalatable*, the author trusts to their *truth and strength* for their apology."

Such, gentlemen, are the denunciations levelled at botany, such the arrows which the author bars, by affirming, that although he is aware "*they must prove rather unpalatable*," he "*trusts to their truth and strength for their apology*."

Botany has been thus, as it were, put upon her trial, and three very serious counts appear in the indictment.

1st. That "*concerning the medicinal efficacy of plants, botany teaches us nothing* ; and that, "*for the purposes of the healing art, botany is positively worse than useless*."

2d. That botany can be deemed worthy of a certain degree of consideration only, because there is certainly no sort of knowledge, however humble, that does not possess some little share of intrinsic importance."

3d. That "*it contracts the intellectual as well as the moral qualities*." "*And that, while most other sciences tend to develop the faculties, imparting a comprehensive and expanding influence, botany has a tendency of quite an opposite character*."

These indeed, are serious accusations, and should botany be cast on any one of them, its present (we believe well-deserved) reputation would at once give way, and without chance of redemption, to obloquy and reproach.

But to all these grave charges the science pleads not guilty.

It denies that the study of plants either is or can be unworthy the attention of the philosopher, whether medical or general. It denies that enthusiastic botanists have been enthusiasts on a useless subject. It denies that for the purposes of the healing art botany is positively worse than useless ; and it rebuts with strong, yet calm indignation, the charge that it has a tendency to contract the intellectual as well as the moral qualities.

To the first and second objections answers already have been returned, and hereafter practical answers shall again be given ; in which examples shall be brought to prove that botany is not useless to the general, nor worse than useless to the medical philosopher. The demonstration is only at this time deferred, because I have already encroached too much on your patience, to trespass any further on your attention now ; but perhaps at a no distant future meeting, the Council will permit me to return to the topics thus postponed, and then enlarge more fully on the three departments of our much-loved science, than could possibly be done in the few remaining minutes of this lecture ; viz. Vegetable Physics, Systematic and Economic Botany, from each of which abundant evidence may be drawn of

the advantages of a study which has been so presumptuously condemned. But, gentlemen, I scarcely think that botanists are called upon, and indeed I know not whether we are even justified in giving a serious and formal answer to charges so manifestly absurd. In the early part of this lecture I enumerated some few of the very many points on which I am disposed to think the study of botany throws no little light ; to these I refer, and these I should have been contented to refer again in such general terms alone, did not the accusations quoted seem to require some more specific answer. To you, gentlemen, I do not address this answer (but to the sceptic who has raised these cavils it has been addressed, and if not convinced, at least he has been silenced,) for it would be an insult to your understandings, who have formed this society, devoted to the advancement of medical botany ; it would be an insult to all those liberal and enlightened men who have for ages past associated themselves together for the promotion of the study of plants, to attempt to prove the value of botany. Those only doubt its use who know it not, and when they know it, they will no longer doubt. Still, as the libeller unblushingly affirmed "*the truth and strength*" of his accusations, it became our duty to disabuse those who might be deceived, and to demonstrate their utter falsity and weakness.

The importance of botany to the general philosopher is immediately confessed by all who know any thing of the discoveries made in vegetable physics. To take but a single illustration : organic botany lately has revealed two very extraordinary phenomena, the full value of which we are as yet unable to determine—*I mean the molecular motion, discovered by the celebrated Mr. Robert Brown, and electro-filtration, since called endosmose, discovered by Porrett and Dutrochet ; are these unworthy the attention of philosophers ? can such truths be useless in philosophy ?*

Again ; the doctrine of final causes receives some of its least exceptionable illustrations from vegetable physiology. Not that the argumentum a posteriori is more conclusive of design in plants than in animals, but that the sceptic's baseless cavil, which would attribute the design to the sensual being in the one case, the most bold effrontery never has, and never can adventure in the other.

[We regret that our space prevents the insertion of the illustrations here given, they were peculiarly apposite, and as they formed, as it were, an episode, we shall probably find room to publish them in our next or the succeeding Number.]

Every leaf of this book of nature is pregnant with important truths, but time forbids me to digress on the value of botany as a branch of general knowledge, and to descant on its particular advantages to the study, and in the practice of medicine, would be totally

a work of supererogation, as it is but a few months since I discussed the point fully in my inaugural address, delivered in this room, wherein I showed what fatal accidents had frequently occurred from herbalists and others mistaking poisonous for esculent plants, and what disappointment and lamentable consequences have ensued from their substituting, either through ignorance or fraud, poisonous for harmless, inert for active herbs, in medicines. Even since I then addressed you, two further cases have come to my knowledge, in one of which a child was poisoned—and in the other a herb-gatherer had laboured hard in collecting what was presumed to be conium, for the market, but which I found was an entirely different umbelliferous plant, viz. the *cherophyllum temulentum*.

Having shown, I think sufficiently, at least as fully as the present time will permit, although far less fully than inclination would persuade, the importance of botany both to the general and the medical philosopher, I must hasten to conclude; for the third objection, which attributes to it a tendency to contract the intellectual as well as the moral qualities, has been anticipated, by the proof of its being one of the most discursive and liberal branches of natural knowledge. But this last charge, which is indeed the most serious by far, the annalist has himself disproved, for he admits that "few great men have been distinguished as botanists merely," that some have no one can deny, and "those who have ever obtained a character in this way," we are told "were such as would have been as great in the path of celestial mechanics, had they turned their attention to that study." No doubt they would, but this is no evidence that botany "contracts the intellectual as well as the moral qualities;" to us it seems a proof that it has "a tendency of quite an opposite character," for most great botanists, such as Haller and Linnæus, it is confessed even in this attack, have been celebrated for "their multifarious talents and pursuits." Yes, gloriously indeed do the lives of Ray, Haller, and Linnæus, of Evelyn, Erew, Malpighi, Duhamel, Sloane, Banks, and many, many others, both foreigners and natives, indeed of almost all who have pre-eminently excelled as botanical philosophers, refute the charge, and prove triumphantly that the study of plants has a *tendency to contract neither the intellectual nor the moral qualities*. On the contrary, so far is such a statement from the truth, that I scarcely know the science which can summon a greater number of enthusiastic votaries, who have shone with greater lustre, either as philosophers or as men. But the charge is so egregiously absurd, that I can scarcely excuse myself for having thus long dwelt upon it; and had it been preferred by the "exact sciences" against botany, instead of by a pseudo-soph. the objection might have been

with greater justice retorted: for were the relative importance and expansive tendency of the various sciences to be submitted to a calculation, we should rest content that the tendency of the several studies should be judged of by their effects. You well remember the mathematician, who, when asked what he thought of Milton's *Paradise Lost*, which, after much persuasion, he condescended to peruse, astounded the querist by replying, that really he *did not see what it proved*.

In fact (without meaning it as any reproach) such is the engrossing nature of some of the abstract sciences, that they do confine their students to themselves alone, while botany embraces so many collateral branches of physics, and is so intimately connected with every department of natural history and philosophy, that it is pre-eminently a liberal study, one that cannot fail to enlarge the mind; and hence arises the advantage with which botanists are reproached, viz. that they are seldom celebrated as botanists *alone* but are generally well versed in other departments of philosophy. Long may they continue so to be, seldom may they be celebrated as botanists alone, may they often be great in the knowledge of plants, and also "as great in the path of celestial mechanics," or enthusiasts upon some "other subject equally useful."

But to conclude; before devoting himself to any pursuit, it is natural that man, who has but little time and much to learn, should desire satisfactory proofs of its importance, and after having wrought successfully in the acquisition of knowledge, it is natural that he should expect to reap some advantage from his labours. Hence all sciences have been tried by the ordeal of *utility*, and we complain not that botany should be submitted to the like tests, with its compeers; but it would be too much in silence to allow a study to be condemned as *useless*—to be arrogantly denounced as *worse than useless*, to the general and the medical philosopher, which both have weighed in the balance and when by both it has been found not wanting. To such effrontery it will be enough, indeed, it must be more than enough, to oppose the united sentences of judges well versed in all the bearings of the question, and not as this pursuer is, confessedly ignorant of the subject. We therefore shall conclude this apology for botany, by selecting two or three as samples from many similar testimonies of equal strength; and thus appeal from ignorance and prejudice, to knowledge and truth.

"Botany (says Dr. Howison) is not the superficial science which individuals unacquainted with its minutæ are apt to suppose!"

"On all hands," affirms Rootsey, as the result of his investigations and experience, "on all hands it is agreed that botanical

knowledge is of the highest importance to the professor of medicine :” and (doubtlessly referring to the light, which the anatomy, physiology, and chemistry, of plants, with the other branches of vegetable physics, have thrown upon the general sciences of anatomy, physiology, chemistry, pharmacy, toxicology, and so forth, as well as the important benefits which botanical philosophy has conferred on georgical pursuits, by elucidating the principles, and advancing the practice of husbandry, so that the farmer and the gardener can ensure with less labour, and produce on less land, not only more various crops, but also more abundant harvests than formerly ;) he continues—“ It is thus shewn that botany in its widest sense embraces and comprehends much more than the arrangement of flowers, and that it indeed includes within its grasp, agriculture and many of our arts, manufactures, and trades ;” and with a similar conviction of its importance, Scott, after enumerating with grateful encomia, many of its benefits, has thought himself justified in declaring that botany now ranks in point of sublimity amongst the most lofty of the sciences, and in beauty is second to none ; giving an exquisite charm to various collateral pursuits, and forming at the present moment, one of the richest mines of unsullied gratification to its votaries, who belong to almost every rank and class of society.”

Formerly the ignorant were content to wonder, when they could not understand, *omne ignotum pro magnifico* was then their modest motto ; but times are changed, and it is found to be easier to laugh than learn, more difficult to praise with judgment than rashly to condemn. Well, let them laugh ; if they debar themselves the enjoyments of science, who shall deny them the blandishments of folly ; if they refuse to worship in Apollo’s fane, who shall forbid them reeling in the bands of Comus ?

[The learned and eloquent Professor was greeted, on the conclusion of his elegant and argumentative discourse, with the unanimous applause of his auditors.—REP.]

INTRODUCTORY LECTURE

TO A

COURSE ON FORENSIC MEDICINE,

*Delivered in the Anatomical Theatre of
St. Bartholomew’s Hospital,
Jan. 24, 1832.*

BY GEORGE BURROWS, M.D.

Fellow of Caius College, Cambridge.

It is scarcely a year ago, that a gentleman of great respectability was found dead in his bed, at his own house in the Regent’s Park. He had been in perfect health on the previous evening ; and there was some suspicion that

he had poisoned himself. His body was therefore examined after death, and five medical men made the following conjoint report to the coroner’s jury :—

“ After a minute and careful examination of the cavities of the body, viz. of the chest, the abdomen, and the head ; the chief morbid appearances that were observed, were an effusion of blood into the right and left cavities of the chest, amounting to about six ounces on the one side, and seven ounces on the other ; and a large accumulation of putrid blood in the stomach, mixed with its contents half digested food. The blood-vessels of the brain appeared more turgid than usual : these appearances, however, in the head, were not sufficient to account for death. Upon mature consideration, the cause of death of Thos. K. Esq. appears to us to have been the rupture of a blood vessel on the stomach.

J. P. M. D.	A. H.	} Surgeons.
G. I. M. D.	P. B.	
W. L.		

Dr. P. observed to the jury, that the deceased had died of the same disease as his majesty George the Fourth, only the blood-vessels were much larger in the late king. Such then is a specimen of the pathology of five medical practitioners in the largest metropolis of the civilized world. Such was their ignorance and incapacity to give information on an important question, treated of in all works on forensic medicine.

Are we not then indebted to those who have now attempted to enforce a more competent knowledge of these subjects upon the rising generation of medical men ?

Pursuing the order of the printed syllabus, I shall next treat of suspended animation—a state of the body of much speculative and practical interest.

This condition of the human frame is induced by immersion in water, by exposure to impure atmospheres ; by suffocation and some other causes.

The question of drowning is interesting to the medical man, both in a physiological, and medico-legal point of view. It may be inquired of him in a court of justice, what is the immediate cause of death, when a person is drowned ? What appearances are observed in the bodies of those who have died by drowning ? Are there any signs which will determine, that a dead body found in the water was immersed during life or after death ?

What are the changes which take place in the human body left to decompose in water, and from those changes can it be ascertained how long a body has lain in the water ? The importance of these questions is striking, and unless the medical witness has directed his attention to each of these points, there is little chance of his assisting the cause of justice, in any case of suspected murder.

It is equally necessary, that the medical man should be aware of the external appearance, and of the state of the internal organs of the bodies of those who have died by hanging or strangulation.

Is it not possible, that an individual may be murdered by a dose of prussic acid, and that the murderers may suspend the body after death by the neck, to give the appearance of an act of suicide?

Suffocation is not an uncommon kind of sudden and accidental death; and the bodies of persons, who have died from such a cause, are sometimes found under very suspicious circumstances; and the medical witness is often called to clear up the difficulties of the case.

It is not more than two years ago, that two inhuman wretches were detected in Edinburgh, of having resorted to this method of destroying their fellow creatures, to supply the anatomical theatres, with subjects for dissection. Similar practices may be, and I almost fear have been, resorted to in this metropolis; and I shall therefore revert to the evidence given on the trials of Burke and Hare, for the information of medical students, and for the detection of similar crimes in future.

It is painful to reflect, that medical men are obliged to hold intercourse with such degraded beings as Burke and Hare, to procure themselves the means of learning their profession; and it is most earnestly to be hoped, that the Legislature will, ere long, sanction some other method of providing our dissecting rooms with subjects.

Questions of equal importance, and perhaps of greater difficulty, and delicacy will follow in the course; they are, the physical and physiological proofs of rape and infanticide.

Physicians and legislators are much divided in their consideration of the crime of rape. Some deny the possibility of the perpetration of such a crime. The proofs of its commission are few and uncertain; and perhaps there is no accusation, in support of which, our courts of law have shewn more caution, and jealousy in admitting testimony than in such charges.

A very great improvement in the English law, on this subject, has recently been made, which I shall take an opportunity of explaining.

Of the proofs of the crime of infanticide, one of the most appalling and painfully interesting, I shall treat very fully. But more particularly so, because an important means of proving the commission of the crime has been of late years much disregarded.

I advert to the hydrostatical tests of the lungs of the new born infant.

An eminent and very humane physiologist of the last century, Dr. Wm. Hunter, was the first to throw discredit upon this means of determining whether an infant had respired or not.

Judges and barristers seem all to have imbibed this physiologist's opinions on the subject; but I firmly believe, that if Dr. Hunter were now alive, and could be made acquainted with all the investigations on this point, which have been instituted in the great medical schools of Vienna and Paris, that he would be one of the first to acknowledge the utility of the hydrostatical tests in determining, whether an infant had been born alive or not?

Other points connected with the proofs of the crime of infanticide, and to which very little attention has been paid by medical jurists, are the changes which take place in the portion of the navel string, left attached to the child, shortly after birth; and the different states of decomposition, in which an infant's body is found, at various periods after death, according as the body has been exposed to the air, buried under ground, immersed in water, or in a common cess-pool.

In a trial for infanticide, it is not only necessary to decide by examination of the body, whether the infant was born alive, but it is sometimes of equal importance to determine how long the infant lived, how long it has been dead, and the cause of its death.

A French physician, M. Billard, has made some very valuable researches upon this subject, at the great Foundling Hospital, at Paris, where 6,000 deserted infants are annually received, and where 1,500 die every year. In conjunction with a friend, I have recently verified most of this physician's experiments, in the same hospital, at Paris.

The consideration of wounds and injuries to the human body, with reference to judicial investigations, will next follow; and in this part of the course, I shall detail some very recent experiments, made by Professor Christison of Edinburgh, and some also by myself at Paris, to point out the signs which distinguish wounds and injuries, made upon a body within a few hours after death, from those inflicted during life.

Questions of this nature can only be elucidated by appeal to experiments. The vague and contradictory testimony given by medical witnesses upon this subject, clearly indicates, that they speak only from conjecture, and not from ascertained facts.

To such an extent do these discrepancies exist, that a very able writer on this subject has asserted "that it may be firmly maintained, whether on many occasions the evidence of medical men has not embarrassed, where it should have enlightened, and misled, where it was called for to "direct the steps of justice."—*Paris and Fonblanque, P. 9. V. 1.*

This remark (of Dr. Paris) is, I believe quite true, and I shall therefore devote an entire lecture to the subject of medical evidence.

If a medical man has not reflected very often upon the duties of a witness, and the

best manner of performing them; if he have not read over those trials, where a great mass of medical testimony has been brought forward; if he have not consulted some writer on forensic medicine, it is almost impossible that he should do himself or his profession credit in a court of justice.

The situation of a witness in a public court is so novel and embarrassing to most men, that even those who could perform the most delicate and hazardous operation in surgery, with the greatest coolness, would find themselves thrown off their guard in the witness box.

This loss of presence of mind arises from apathy, from a consciousness of not being well prepared for examination, from not having attentively thought over the subject of the examination beforehand, or from having no original notes to refresh a treacherous memory.

A common and almost unavoidable error on the part of the medical witness is, that of exhibiting too strong a party feeling in the cause.

Perhaps he has long been in attendance upon the individual, whose state of mind or body is the subject of investigation; he may be the confidential adviser of the family of the individual; the inquiry itself may have been instituted by his recommendation, and he may therefore feel that his own character or judgment is compromised, if the verdict be not given in favour of his view of the case.

Another cause of discomfort and discredit to the medical witness is, that he is too prone to theorize, to offer opinions as evidence, instead of facts; and hence is frequently rebuked by the court, or entrapped by a clever counsel into a situation from which he cannot withdraw himself without humiliation.

The counsel, taking advantage of this mistake will, if it suit his purpose, expose this apparent ignorance without mercy, perhaps charge the medical witness with interested motives, completely undermine and destroy the whole of his testimony, and so vilify his character by insinuations, that the medical man in disgust and indignation, will become careless, and perhaps crown the whole by contradicting himself.

The chances of discredit from examination in a public court of law are so great, that a very eminent physician in this metropolis, and who has devoted much time to the study of medical jurisprudence, has publicly said, that if he saw a man in the street who he thought was going to summons him to attend as a witness, he would take to his heels and run away rather than be dragged into court.

It may be expected, that by enforcing attendance upon one course of lectures on forensic medicine, the student will have his attention directed to this important part of his professional duties, and that henceforth

medical evidence will be more consistent and reflect more credit upon the profession.

The following division of the course will embrace the highly interesting department of poisons.

These lectures will be delivered by a gentleman, who I doubt not is well known to most present—my friend Dr. Roupell. If zeal, and industry, and a conscientious desire to fulfil the duties he has undertaken, be a guarantee that these duties will be ably performed, I am sure that my colleague will bring all these qualifications into the field.

By this division of labour between Dr. Roupell and myself, we trust that the student will derive much advantage. The topics, which this course embraces are so varied, that they may well employ the time and talents of two lecturers.

The concluding part of the course, which I shall have the honour of giving, will comprise the consideration of those questions, relating to the social condition of individuals, and which may become the subjects of legal enquiry.

These questions are of a mixed nature.

I shall first explain the anomalies of the organs of generation in the human body, and which sometimes render it difficult to decide to which sex an individual belongs.

Persons have passed through the early part of their lives, wearing the dress and following the occupations belonging to the opposite sex to their own, and their mistake has not been revealed, until they have been called upon to serve as soldiers, or they have felt an inclination for the married state.

It is sometimes requisite to pronounce upon the age of a person, as well as on his identity. These questions are of rare occurrence, but it is necessary that the medical man should be prepared to answer them.

The validity of a marriage is sometimes contested on the plea of impotence or sterility of one of the contracting parties, and suits of divorce are sometimes instituted on these grounds. It is therefore an essential part of my duties, as a lecturer on forensic medicine, to point out the means the physiologist possesses of establishing such an imperfect development of the human body, as justifies the accusation of impotence or sterility.

Of the next group of questions, I must trust that the medical student has already a competent knowledge by his attendance on lectures on midwifery.

It will be necessary for me to point out the proofs of conception and quickening, because they are frequently called for, when a person is charged with having attempted to produce abortion, in a woman quick with child. The proofs of pregnancy must also be communicated, because this state is sometimes concealed, and often pretended with the hope of evading the extreme sentence of the law.

Superfetation, or the possibility of a

woman being impregnated, when she is already with child, and the limits of the duration of pregnancy, are both enquiries closely connected with the investigation into the legitimacy of children. In a country, where so much property is transmitted by hereditary descent, these questions are of great importance, and not unfrequent occurrence.

In an earlier part of this lecture, I alluded to the proofs of infanticide, drawn from the dead body of a child.

The charge of infanticide could not be brought home against any female, unless it could be proved, that she had been delivered about the probable time of birth, of the murdered infant. For this and some other reasons, I shall describe the proofs of recent parturition, which may be obtained from an examination of the person of the suspected female.

It is one of the duties of the medical man to decide upon the sanity of the human mind. Can any one undertake such a duty, without a deep and painful sense of the responsibility, which is then imposed on him? If it depends upon him, that by one stroke of his pen, a fellow man shall no longer be considered a rational creature, does it not require a very extended course of study of the human mind, in its sound and unsound state, before he will dare to affix the stamp of mental degradation upon a fellow creature?

Few medical men are conscious of the legal responsibility they incur, in putting their names to a certificate of insanity. Many have never seen such a document, until they are called upon to sign it, and are perhaps, unaware of its full import.

Much less have they foreseen the risk they run, when summoned before a court of enquiry, into the state of their patient's mind. Until a man has once been placed in such a court, and has unfortunately exposed himself, by advancing some theory or opinion on the nature of insanity, and felt all the humiliation of being ridiculed by a clever advocate, struggling for victory at any price, he will not fully acknowledge the importance of devoting his mind to this question.

If, however, the information, that I can give you upon this subject, shall be the means of preserving any one of you from such a painful exhibition, and from its bitter consequences, I shall think the time and study bestowed upon the preparation of this course most amply repaid.

The course will terminate with a few lectures on questions usually ranged under the title of medical police. In a former part of this lecture, I have pointed out the importance of these questions, to the well being of society, and how requisite it is, that the medical practitioner should have a competent knowledge of them.

From the brief sketch, I have now attempted to draw, of the various subjects to be discussed in these lectures, I am sure that

the medical student will feel fully convinced, that for the sake of his own reputation, for the sake of the due administration of justice throughout the empire, he ought not to consider his education complete, until he has devoted a certain portion of study to this branch of medical science.

It is almost needless for me to say, that a barrister must be more capable of doing justice to his client, if he have given some previous consideration to this part of medical science, for it is evident that he will thereby be much better able to examine and comprehend medical witnesses.

It remains for me to point out to the student the treatises on this science most worthy of his notice, and what are the previous studies required for the clear comprehension of all the questions contained in this course of lectures.

Medical literature on this science does not carry us farther back than the commencement of the 16th century, when Charles 5th of Germany promulgated a code of laws; having express reference to the subject of medical jurisprudence. His example was soon followed by the Italian, French, and other continental Governments.

From that period the science has been much cultivated, and numerous and voluminous works have appeared treating on it. During the sixteenth and seventeenth centuries the writers of Germany and Italy far excelled those of other countries. Indeed it was not till the close of the last century, that any valuable treatise, on this branch of medical literature, had appeared in France.

The constellation of learned men, which shone forth at the time of the first French Revolution, have added much valuable information to this, as to every other department of medical science.

To our shame it must be recorded, that previously to the present century, no treatise on forensic medicine by a British author existed; and even at the present day, there are but few works bearing the stamp of originality.

The best in the English language is perhaps, "the Elements of Medical Jurisprudence" by the American author, Dr. Beck. This is a compilation of great extent, and the last edition is enriched with some very valuable notes by the English editors, Dr. Darwall, and Mr. Dunlop. This book is well worthy of the perusal of the student, and in it he will find the opinions of the foreign authors of the last century very accurately transcribed, and more particularly those of the celebrated French author, M. Fodéré.

To those who have ample time, much information may be obtained from the voluminous work of Paris and Fonblanque, on medical jurisprudence.

Dr. Gordon Smith's "Principles of Forensic Medicine," is a useful work; but more especially so, because it contains a large number of cases illustrative of the principles of the science.

To those who are familiar with the French language, I would point out the best modern work on this science. I refer to the last edition of the *Leçons de Médecine Légale* of M. Orfila, published in 1828. Although this treatise is composed to illustrate the legal provisions of the code Napoleon, and therefore inapplicable to English law, still the scientific knowledge displayed in its pages, is so superior to that contained in any other work, that it will amply repay the English student for the time devoted to its perusal.

Those branches of forensic medicine which fall principally under the observation of the accoucheur, are very well discussed in M. Capuron's work on "*Médecine légale relative aux accouchements*."

The extensive work of the French author M. Fodéré on legal médecine is very elaborate, but is now almost behind the actual state of the science; and you will find the most useful parts translated nearly verbatim in the *Elements* of Dr. Beck.

The student may perhaps think that I have confined myself too much to modern authors, and paid too little respect to the opinions of the older writers. In answer, I shall cite a few lines from Professor Christison's excellent treatise on poisons. He says, "in medical jurisprudence, above all the other medical sciences, it has appeared to me, that the precision and accuracy of facts generally follow the inverse ratio of their antiquity; and such being the case, so long as there is an abundance of modern instances, I see no reason for quoting the authors of past centuries." I would add that every branch of science has made such vast progress, that those treatises published prior to 1800, are of little value.

To those who are anxious for a more extended list of works on this science, I refer them to a catalogue of authors prefixed to *Beck's Elements of Medical Jurisprudence*, and *Dr. Young's Medical Literature*.

With reference to the previous studies requisite, I should say, that the complete knowledge of all that makes a good physician is required to comprehend the different parts of this course. What these qualifications are, it is not for me to detail here, but I may add that it is stated by the late eminent Dr. Young, in his introduction to medical literature, (which I would strongly recommend to the notice of every medical student), "that there is no study more difficult than that of physic, it exceeds as a science the comprehension of the human mind;" and perhaps, gentlemen, his mind was one of the most comprehensive that has existed in the present century.

There is certainly no branch of science, which may not be cultivated with advantage by the physician; each will afford him more abundant means of investigating and counteracting the causes and effects of disease.

I do not mean that every medical man ought to enter with minuteness into each

particular branch of science, but he should have a general knowledge of each, the more intimate the better.

He should, above all, take an enlarged and comprehensive view of this great universe, and the laws which govern it. He should as it were, from an eminence survey the whole, and examine each part in detail, as far as his opportunities permit.

He may suppose the whole of the created matter of our world, to form one vast and stupendous cone; on whose apex stands a rational and intelligent man, whose base is of almost infinite extent, and of adamantine structure, but of the precise nature of the interior no one knows except that Omniscience who inhabiteth eternity.

Widely different as is the perfect organization of man on the summit, from the inorganic mass of the base, still the gradations through the mighty scale are so insensible; the parts are so harmoniously adapted to each other; the transitions are so gradual, that we hardly know where to draw the line, which distinguishes the intelligent being from those which simply enjoy the vital principle; or again, to point out the separation, between organised living bodies, whether animal or vegetable, from inorganised, lifeless, inert matter.

It is the peculiar privilege of our profession, gentlemen, to be continually contemplating the outward materials of this vast creation, and to be constantly searching into nature's most hidden operations. Nevertheless, after the lapse of many centuries of laborious study, regions of science still remain boundless and unexplored.

"We may still," to make use of the beautiful language of Sir J. Herschel, "imagine ourselves, as the immortal Newton figured himself, standing on the shore of a wide ocean, from whose beach, we may have culled some of those innumerable beautiful productions it casts up with such lavish prodigality, but whose acquisition can be regarded as no diminution of the stores that remain."

"Seeing then, that all the longest life, and most vigorous intellect, can give man power to discover by his own research, or time to know, by availing himself of that of others, serves only to place him on the very frontiers of knowledge; and afford him a distant glimpse of boundless realms beyond, where no human thought has penetrated; but which, he is sure, must be no less familiarly known to that intelligence, which he traces throughout creation, than the most obvious truths, which he himself, daily applies to his most trifling purposes. Is it then wonderful, that a being, so constituted, should first encourage a hope, and by degrees acknowledge an assurance, that his intellectual existence will not terminate with the dissolution of his corporeal frame; but rather, that in a future state of being, disencumbered of a thousand

obstructions, which his present situation throws in his way, endowed with acute senses and higher faculties, he shall drink deep at that fountain of benefit, wisdom, for which the slight taste obtained on earth, has given him so keen a relish."

Herschel. *Introduction to the Study of Natural Philosophy.*

Review.

The Cyclopædia of Practical Medicine.

—Edited by JOHN FORBES, M.D.,
ALEXANDER TWEEDIE, M.D. and
JOHN CONNOLLY, M.D. London,
Jan. 1832. Part I. Royal 8vo. pp.
112.—Whittaker and Co.

AH, Messieurs! *Promettre est un, mais tenir est un autre*;—which, explained for the country gentlemen, imports that,—to write a prospectus is one thing; but that to fulfil all it promises, is quite a different sort of matter.

We humbly beg pardon of the editorial triumvirate whose names stand at the head of this article; but we do presume to think that the plan of their common production, as well as the execution of its details, are by no means consistent with the expectations which an association of such men was calculated to excite.

And first,—as to the plan: We object principally to the *price* of the 112 pages, of which this part consists. Five shillings are no bagatelle in these days. For that sum we can have our Waverley novel; or we can have our volume of Byron; or (barring the season) we can command a noble repast at the most luxurious of our hotels. Five shillings, let us say, will do a great deal in the literary market; and those venders who frequent the intellectual mart, would do well to take a warning from that "dullness of demand," and that "heaviness of sales," which so much distinguish the book-transactions of our day.

In the next place, we are at a loss to know, upon what principle it is, that the Key-words of this Cyclopædia are chosen. We first had concluded,

that we were to look out for a particular article according to its Latin name;—but "Age," and "Air," and "Antiphlogistic regimen," and a few other English titles, soon convinced us that we were wrong. We then made up our minds that an English vocabulary would have been adopted, with some occasional exceptions, until we found *Dropsy* under the title of *Anasarca*,—and *Falling off of the Hair*, dignified with the designation of *Alopecia*!

In the third place, we desire to know the system of selection that has been adopted with respect to the subjects which are successively treated in this work? We shall illustrate our meaning by an example. We find here a paper on the exploration of the abdomen, which, it must be admitted, is only a division of the general science of *Auscultation*. We have again an elaborate dissertation upon *Acne*—one of the forms—and we must add, the one of least importance of cutaneous diseases. Now if *Acne*, and abdominal exploration are detached from their proper situation, and thought worthy of distinct dissertations respectively, we should like to know why *Ague* has been treated with such sovereign contempt. How is it also, that whilst "Age" and "Change of Air," and "Antiphlogistic regimen," are deemed essential to the illustration of what is called "the philosophy of medicine," such a vast engine of disease as "Aliment" should be passed over in profound silence. Again, if *Achor*, *Anæmia*, *Anthelmintics*, and *Antispasmodics*, be thought worthy of illustration, what ground was there for neglecting *Alusia* (so well described by Mason Good) and *Anæsthesia*, together with *Ætiology*? We are not in love, let it be observed, with either the pedantry or the metaphysics of the schools; but let us have none of them at all; or, admitting them once, let us be impartial in our selection.

So much for the plan of the Cyclopædia—and now for the execution.

The first object of our curiosity was the series of definitions, which we anticipated would form a substantial part of each article of the work. Definitions in general are exceedingly troublesome. Many a worthy man has run his head against them; so difficult is it to frame a description which shall exactly comprehend all that belongs essentially to the subject, and yet shall exclude all that is foreign to it. Let us see how the Doctors have surmounted the natural difficulties with which the task of defining is almost always connected.

Dr. Marshall Hall, the writer of the paper on "Abstinence," states, that "by this term is meant the *excessive* or *total* privation of food." Will the Doctor inform us after this, what is the meaning of the word "famine?" What, we reply, but an excessive or total privation of food. And yet, not fifty lines from this definition, Dr. Hall gives us a chapter on the "curative effects of abstinence"—abstinence, which consists, according to the same author, in an "excessive or total privation of food!" In our school days *abstinence* was described as importing the act or habit of refraining from something to which there is a strong propensity.

Dr. Elliotson's article on acupuncture commences with the following paragraph, to which we beg the particular attention of our readers.

"The passing a needle into the body, is termed acupuncture. From forgetting that the word *puncture* has two significations—that it is used to signify both the wound and the act of making it, some have termed the operation *acupuncturation*. But to subjoin the syllables *ation* to the word *puncture* or *acupuncture*, is as improper as to subjoin them to the words *preparation* or *fabrication*, each of which already ends in *ation*, and has a similar twofold meaning. An exactly parallel error would be to say *manufacturation*. Here is a definition! "The passing a needle into the body is ter-

med *acupuncture*." Is it indeed? Why then it follows, most accurate Doctor! that the sempstresses of this country perform the operation with marvellous dexterity. We have heard of many cases of young women swallowing needles; and if that be not "passing them into the body,"—if that be not Dr. Elliotson's downright "*acupuncture*," we have no conception of the meaning of words. As to the remainder of the Doctor's paragraph, we beg to offer for his deliberate consideration a well meant suggestion; which is, that he would forthwith forswear all philological discussion, and addict himself to physic. Nothing can be more contemptibly trifling than his observations on the terminating syllables of *acupuncturation*. He supposes a parallel between words, which in their derivation and their termination bear no possible resemblance; and, only that sufficient time and space are not afforded us, we think we could show from the very paragraph under consideration, that the Doctor has materially mistaken his own powers. A further illustration of this opinion is to be collected from a subsequent paragraph. We give the Doctor's own language, and we hope that the reader will pay particular attention to every word.

"Between the frightfulness of running needles into the flesh, and the high improbability of any benefit from such a practice, a *hundred and seventeen years elapsed* (!) before any European practitioner made trial of it."

What, in the name of common sense, does all this mean? "Between the frightfulness of running needles, &c. &c. a hundred and seventeen years elapsed!" Pray, what was the era of the frightfulness of running needles into the flesh? Before or after the deluge? Again, in what year of the Lord did that strange event take place—"the high improbability of any benefit from such a practice?" How would Dr. Elliotson look, we should like to know, if one of his pa-

tients were to enquire of him, how many years London Bridge was from that at Westminster! We cannot however take our leave of the article on acupuncture without expressing our warmest acknowledgments to the author, for the cautious and judicious advice which he has given to those who may be called upon to perform this important operation; he would not advise, he says, that the needle should be passed into "viscera, articulations, or blood-vessels." The young practitioner will therefore be cautious to avoid the carotid, the femoral, and the brachial arteries; and he must by all means make up his mind to withhold the needle from the auricles of the heart: and he should remember that the lungs do not well bear the needle. How sagacious, how severely circumspect is the admonition of the Doctor.

The only other definition, which we have the space to mention, is that of *Amaurosis*, by Dr. Jacob. "In practice," says this physician, "when a patient without opaque cornea, closed pupil, or cataract, complains of lost or defective vision, he is considered to suffer from this disease (*Amaurosis*)." We beg to inquire, is the writer serious? Is this the way the professor means to teach the simple English the derangements of vision? What, we ask the Doctor, does he think of conical cornea?—does not that condition cause a defect, if not a complete loss of vision, and yet it is *not* *Amaurosis*?—Then allow us to ask, if in *staphyloma pellucidum*, or hydrophthalmia, perfect vision can exist?—and yet there is no *Amaurosis*. What must be the common sense—what must be the prudence of these men who cannot "let well enough alone?" Why attempt to improve upon the acknowledged perfection of the definition, which Mr. Lawrence has left on record of the nature of *Amaurosis*?

Now our motive for these strictures is purely this:—We see in the pages

of this work the elements of extraordinary power to diffuse important and useful counsel to every member of the medical profession. We do not wish to behold such influence obstructed in its practical application, by puerilities, by false theories, by a limited and inconvenient plan, by precipitate opinions, by hast and undigested theories. We speak in due season—we advise whilst yet there is the *locus penitentiae*. We point out faults at a moment when there is ample scope for correction.—If we do not succeed in aiding the efforts of the contributors to this Cyclopædia, in rendering it valuable to the profession, the sole view we have in thus noticing it will be completely frustrated.

We are fully aware that great allowances must be made for the execution of a work on which so many writers are engaged; but this is no excuse for glaring defects in such a publication. We have carefully perused all the articles, and must declare, that we are dissatisfied with every one of them. We must contend that all are far behind those in foreign Cyclopædias. One of the best articles is *Exploration of the Abdomen*, by Dr. Forbes; but we beg the impartial reader to compare it with the article *Abdomen*, abridged from the new French Dictionary of Practical Medicine and Surgery, which is appended to our last and present numbers, and then form his own opinion on their respective merits. The papers on *Angina pectoris*, by the same author, on *Abscess*, by Dr. Tweedie, and on *Aneurism of the aorta*, by Dr. Hope, are, with the former, the best in this section of the work. The article *Abortion*, by Dr. Lee, is not half so good as it ought to be. It is far inferior to the description in any of the modern works on obstetrics. It is too short, and too superficial on the causes and treatment of this dangerous disease. It is not calculated for the student or young practitioner; and it leaves him perfectly uninformed how

to proceed at the bedside of his patient. While we complain of the brevity of this practical subject, we have no reason to be satisfied with the extent of space occupied with Alopecia, or baldness; Achor and Acne, by Dr. Todd; and Age, by Dr. Roget; the latter, though well written and too poetic, having little connexion with practical medicine. Again, we have to complain of the brevity of Amenorrhœa, by Dr. Locock, and his omission of ammoniacal injections, as advised by the Italians. Dr. Hall has well described Anæmia, and Dr. Darwell is tolerably successful on Anasarca. Dr. Whiting is as superficial as may be desired, on Anodynes; Dr. Thomson very little better on Antispasmodics, but more successful on Anthelmintics; while Dr. Barlow is as concise as possible on the Antiphlogistic Regimen; Dr. Jacob on Amaurosis, and Dr. Hope on Aneurism of the Aorta, are too diffuse, when compared to the brevity of their colleagues. We entreat these writers to compare their respective labours with those on the same subjects, in any of the French Dictionaries. It is painful to us to censure a national work of this kind, but duty and impartiality command us to express our candid opinion. Let the editors attend to our suggestions—let the articles be as concise and practical as possible—let, in a word, the work be worthy of the age and country in which we live; and let the combined efforts of the contributors produce results, which cannot be attained by monographic writers on Practice of Medicine; and then, success is certain. Those who desire to possess a record of the opinions of some of the eminent physicians of this country, can obtain it in this original publication. Notwithstanding numerous faults, the work has its merits. It will afford us sincere pleasure, if we can praise the future numbers.

SELECTIONS FROM

THE CLINICAL LECTURE,

*Delivered at St. Thomas's Hospital, Monday,
February 6th, 1832,*

BY DR. ELLIOTSON.

*Continued Fever—Efficacy of Saline Medicines
—Type of Fever now prevalent.*

HANNAH Jones, aged 26, had been unwell about a fortnight. When first seen she was found lying on her back, unable to move or speak; with tenderness over the whole of the abdomen, and great prostration of strength—pulse weak, hardly perceptible, beating 130 in a minute. Leeches were applied to the abdomen, a mustard poultice directly afterwards, and cold lotions to the head. This was done before Dr. E. saw her. At the time he first saw her there was scarcely a hope that the woman could recover: finding her pulse very weak, and the other symptoms remaining, leeches were out of the question. She was, therefore, ordered two pints of beef tea, and two pints of milk. The bowels were confined; but owing to the extreme debility that existed, Dr. E. was afraid to give her any purgatives, or to administer any thing in the shape of a purgative, by injection. He, therefore, ordered her an injection of barley water, and the next day half an ounce of wine every four hours. But the woman continuing to get weaker, the wine was given every three hours—and afterwards, in consequence of the debility becoming more urgent, it was given every three hours to every hour, from that to every half hour; so, that in the whole, she took twenty-four ounces of wine daily. During the whole of her illness she was placed under a saline treatment. Dr. Clanny states that the blood, when in a typhoid state, contains no carbonic acid, and only a very small quantity of saline matter; and Dr. Stevens says, if neutral salts be added to blood, it will render it scarlet, but if acid be mixed with arterial blood, it will immediately render it black. Now this treatment will do good in those patients who have got over the acute stage; but during the inflammatory stage we ought to reduce the patient by active antiphlogistic treatment. After the typhoid symptoms have set in, then is the time to restore the patient, by the neutral salts; a scruple of carbonate of soda was therefore given every four hours. If he had seen her in the early stage, he would have applied cold ablutions, and kept her on barley-water; but in this case the patient was sinking when he saw her. He scarcely ever gives wine. His treatment, in most cases, is cold ablution and starving. He has seen so much benefit arise from mercury, that he is in the habit of giving it, rather than letting the patient run the risk

of dying of the disease; although he does not give it so as to produce a very sore mouth, but merely to moisten it, and make the gums tender. But during the last year there has been so much debility, that in those cases which have come under his care, it has been necessary to give wine—though he never before gave so much as to this patient. The woman is now almost well, and able to walk about the wards. The cure of this woman cannot be attributed to the neutral salts, owing to the large quantity of wine she had taken; although, at the same time, Dr. E. says that he has great reliance on the statement of Dr. Stevens; but never seeing this practice adopted, he could not trust to the salts alone, seeing that she was labouring under so much debility. And it is probable, if she had not had the wine, she would not have recovered; and she might not have recovered so speedily, had it not been for the soda. At the latter part of her illness she experienced great pain about the abdomen, for which a clyster was ordered to be applied to the part affected, but the wine to be continued. This case is very interesting, in shewing how much wine might be given in some kind of fevers; and at the same time shewing that the same treatment is not required for all.

Dr. Elliotson then gave another case, very similar to the last; but said, that Dr. Stevens having told him, in conversation, that he had seen much benefit arise from the nitrate of potass, when mixed with the carbonate of soda, he therefore had ordered ten grains of each to be given every four hours.

EFFICACY OF HYDRIODATE OF POTASS IN VARIOUS DISEASES.

Scirrhus Disease of the Womb—Large Doses of Hydriodate of Potass in various Diseases.

MARY Martin, aged 65, was admitted into this hospital, troubled with a mucous discharge, mixed with blood, from the vagina, and with great pain about the loins, extending along the hips, down the thighs. This kind of discharge creates a strong suspicion of its being a cancerous disease. Dr. E. therefore made an examination per vaginam, and found the neck and body of the uterus enlarged, and appearing as one mass. He had read, in authors, that the hydriodate of potass had been given with success in various organic diseases; but must confess, when he gave it in such minute quantities as had been recommended, he was not at all satisfied with it; but afterwards increasing it to ʒj doses, and from that to two drachms, he then found it more successful. He had since given it in enlarged spleens, and other indolent tumours, with beneficial results—especially one case

about three years ago of enlarged liver, extending down as far as the umbilical, which got well under the influence of this medicine. He has found it act as a diuretic, in common with all the salts of potass; and has given it, occasionally, as a diuretic, with beneficial results, in dropsical effusions, but it is generally used to cause absorption of chronic enlargements. Formerly he was in the habit of giving it in diseases of the uterus, but did not observe any good effect from it, which he imagined arose from the smallness of the dose which he administered; but he afterwards gave it in the same diseases in larger doses.

A woman came into one of the wards with a scirrhus disease of the uterus, in which case Dr. E. made up his mind to try the hydriodate of potass. Half a drachm was therefore given to her three times a day, commencing on the 9th of December; on the 13th, the dose was increased to ʒj. and on the 29th, to ʒij. which she took three times a day without any sickness. Ten grains of the extract of conium were given to her, and afterwards increased that to a scruple twice a day. The woman soon lost all her pains. Dr. E. was very much surprised at the result. One day as he was going round the wards, she told him that she felt quite well: being at that time in a great hurry, he did not examine her, which he has much regretted since. The result might have been from the extract of conium allaying the pains; but whether it was from the hydriodate of potass, he is dubious. If you wish it to do good, you must always give it in as large a dose as the patient can bear it. This patient left the hospital, and declared that she was quite well, although, he must say, he does not believe that she is so.

[We request the reader to turn to our report of the proceedings of the London Medical Society, Feb. 6th, and contrast the observations of Mr. Callaway and Dr. Ryan, on the use of hydriodate of potass in scirrhus uteri, and the danger of administering large doses of that remedy with the above statements. We beg leave to suggest to Dr. Elliotson, to direct some of the salt in a pure state, to be procured from the Apothecaries' Hall, and inform the profession of the effects of two-drachm doses, continued for a length of time. The testimony of such a cautious and judicious practitioner as Mr. Callaway, whose well known extensive opportunities of observing disease in Guy's Hospital, and in a very large circle of private practice for many years, is entitled to the fullest confidence. He has known the remedy given in small doses to as fine a young woman as we could behold, followed by general emaciation and absorption of the mammae to a great degree.—Eds.] Since the above was in type, we found it impossible to insert the report to which we have referred.

SELECTIONS FROM THE
SURGICAL LECTURES,

Delivered at King's College,

By J. H. GREEN, Esq. F.R.S.

In the Sessions 1831—32.

Fractures of the Cranium, with depression.

GENTLEMEN.

FRACTURES of the cranium, with depression, are infinitely more interesting to the surgeon, than those fractures of the cranium which are not attended by such a circumstance. Depression, you are aware, means that state of a portion of bone, which being broken away from its position and connexion, is *depressed* below the edge of the surrounding bone. Let me first observe to you, that though in the examination of a head, you may ascertain, that there is a depression or sinking of the bone, you are not always to make sure of witnessing compression of the brain, as its consequence. You will have cases, for instance, in which, though there may be a very obvious depression of the external table of the cranium, still you find the internal table without any appearances of injury. Here is a specimen of a cranium, where, as you may observe, a very striking depression of the outer surface of the bone has occurred; the diploe you see is crushed beneath it, but the internal table remains entire. The same thing takes place in fractures of the frontal sinuses. You will have the external table broken, but the table nearest the brain will be unaffected by the accident. But though you may witness a very considerable depression of the external bone, without any injury to the internal one, you may on the contrary, have a very small external depression, with a very extensive internal one, so that the brain being pressed upon by the bone, you will have symptoms of compression in the patient, without your being able to explain the cause, by a reference to the superficial state of the cranium.

We have on record, singular examples of depression of bone, in children; that is to say, the bones will have ossified only to an extent, that admits of their possessing a great degree of elasticity—their earthy part giving way, while the animal part remains. There is in consequence, great facility of bending in these bones, and it is to this circumstance, and not to fracture, that we are to attribute that sort of depression to which I allude. I have seen an instance of this in a child, at least I think I have, because fortunately, there has been no opportunity as yet, of making that examination, which would remove all doubt. I was sent for to attend an infant in my neighbourhood, who had, whilst asleep, fallen down, and struck its head on the protruded leg of the sofa, on

which it had reposed. A dent was observable on the skull, into which I could put my finger, and the circumference of it was nearly as large as that of half-a-crown. The early age of the child will account for the nature of the accident; and what is remarkable, no symptoms of compression were manifested. I believe, gentlemen, that the brain of a young child, will bear more violence with impunity, than that of an adult, and it would appear very singular, that when the skull of an infant undergoes the sort of indentation which I have just described to you, it will very soon disappear, and the cranium will resume its natural configuration. I suppose we may attribute this speedy restoration, partly to the elasticity of the bones, and partly to the constant pulsation of the vessels against the inner table of the skull.

Then, gentlemen you are to understand, that fracture with depression, may prevent several modifications, varying as we have seen from the slightest inequality to the complete overlapping of the bones. I have stated enough on a former occasion, to shew you, that the symptoms of depressed bone, likewise vary. Sometimes you will have peculiar symptoms of concussion, and when the patient recovers from them, he is likely to remain well. Thus too shall you have symptoms of compression, which may be very slight. You may in general conclude, that the degree of the depression of the bone is a good index to the degree of compression on the brain, as the latter would be the means of accounting for the difference of symptoms, manifested in every variety of depression.

Again; the *direction* in which the injury is inflicted will guide you to the train of symptoms which you are to expect. If, for instance, pressure be made laterally on the brain, that is, from side to side, there will be no compression; I mean in respect of the usual effects which it produces. These effects result from the pressure being applied vertically—from above downwards, and though there can be no doubt that pressure on the side of the skull will more or less cause pressure on the base, still this lateral pressure will not produce the same proportion of compression relatively to its force as the other I have mentioned. It is now deemed an established principle, that the symptoms of compression will not arise unless the nervous plane of the brain—the medulla oblongata and cornua cerebri—be implicated in the pressure. This is the part I especially affected by pressure, and you may have it entirely free from such influence; whilst the case in other respects would lead you to expect decided symptoms of compression. This view will at once account for the notorious fact, that the effects of fracture of the cranium with depression are very various, and will not always be explained by the degree of inequality of the depressed bone.

Gentlemen, the first proceeding in which you must engage in a case of suspected fracture of the cranium, with depression, is to ascertain that there is such an injury, if it exist. Very lengthened directions are given for conducting this examination; but it is plain that if you have the integuments lacerated, as generally occurs, and the bone denuded, you will not find much difficulty in tracing the fracture and depression. And yet let me tell you, that I have known one of the sutures of the skull to be mistaken for a fracture; an error which your knowledge of anatomy, I am sure, will secure you from committing. But there is another mistake to which the inexperienced surgeon is liable.

In carrying the fingers beneath the scalp along the cranium, the person making the examination meets with something which he deems very peculiar; he finds a hard edge, and when the fingers are moved beyond this edge they sink, and the surgeon, if he has not had experience, will be apt to conclude that there is depression of the bone. But the truth is, that this appearance is nothing more than extravasated blood; and if the cellular membrane over it be gently pressed, the coagulum will be soon dissipated.

But say that you have discovered fracture—that you feel an inequality in the bone, but you do not know if there be depression, then you should look to the symptoms; and if you find any signs of compression, make an incision down upon the fractured part; for by this measure only can you properly examine the bone, and ascertain its condition. But should it be evident that there is fracture, with depression, and if there be no symptoms of an urgent nature, then there is no necessity for the incision. Some surgeons have made a sort of bug-bear of the operation of cutting the scalp. The old surgeons used to cut away the scalp, without any consideration about the consequences, in order to have an extensive field for examination. But this, I need not say, is objectionable practice, because by extensive wounds in the scalp, you are likely to produce erysipelas. But a clean wound of the scalp down to the bone will seldom be attended with any bad results; at all events, the danger that may arise from the incision of the scalp is as nothing in the scale, compared with the value of the information which you may obtain by having recourse to such a measure. Thus, then, we come to the conclusion, that if the case, from the nature of the symptoms, demand no operation, you are to do nothing; but that if you see symptoms of compression, and that you are not decided as to depression of bone being the cause—in that case, I say, you should divide the scalp, and cut down to the bone.

THE

*London Medical & Surgical Journal.**London, Saturday, Feb. 11, 1832.*

PROFESSOR GREEN'S UNWARRANTABLE ATTACK

ON THE

London Medical and Surgical Journal.

DAME Partington herself, wielding that awful besom, wherewith she purposed to lord it over the billows of the Atlantic—poor soul! *she* was but an effigy of that sublime spectacle, which Professor Green presented in his own person, on the eventful evening of the 6th instant, when, on entering the theatre of King's College, he proclaimed his haughty mandate to the medical press in general, and to the *Medical and Surgical Journal* in particular. Never did we behold the outward signs of that invisible tempest, to which exalted minds only are exposed, so graphically portrayed, as in the countenance of the Lecturer, on the occasion to which we allude.

Tantæne animis cœlestibus iræ.

We absolutely thought that the very scarlet of the rich lining, with which his professor's robe is so gracefully turned up, and which Mr. Green knows so well how to display, had actually grown pale beneath the deep suffusion, which mantled every feature of the Lecturer. Happy was it indeed that none of the preparations which lay scattered on the table before him, belonged to

the order of combustible materials: otherwise, we can hardly calculate the mischief which an explosion would have produced.

Mr. Green began by holding up a small book, which he said was a manuscript, and from which he intended to *read* the lecture of that evening. The pupils he was sure would not be surprized at this novel proceeding, when they heard that it was adopted by him, as a means of securing to himself that right of property in his lectures, which was sought to be taken from him by others.

This precaution, he said, was rendered necessary, by the recent bold and *dishonest* attempt of the conductors of a new Journal, which he supposed, most of those present had seen, he meant, the *Weekly Medical and Surgical Journal*,—to appropriate to their own immediate purposes the course of lectures, which he (Mr. Green) was then delivering to his class. When this Journal appeared with a lecture of his inserted in it, he wrote to the publishers, informing them, that he would use every effort which was authorized by the law to put a stop to the further publication of his lecture,

In a day or two after this a letter was received: Dr. Ryan, one of the editors he supposed of the Journal, called upon him, and behaved during the interview with a degree of courtesy and urbanity, which highly deserved his (Mr. Green's) approbation. But Dr. Ryan was informed, that he (Mr. Green,) could on no terms accede to the publication of his lectures, and there the matter rested. Now he (Mr. G.) assured the pupils, that he was determined to carry into effect the resolution which he had expressed to Dr. Ryan,—and he held in his hand a letter addressed to the Council of King's College, the terms of which he would read for them.

The letter was read, and we will venture to say that a production more

disgraceful to the good sense, the liberal feeling, to even the prudence of a professional man, never yet was extorted by his passion, from the judgment of a public teacher, since the world began. Mr. Green, in this precious composition, like a delicate school boy who has been hurt in a game of bowls, goes whining before his masters, and asks their protection against his supposed aggressor. He begs of them to enable him to go to law with the Journal, and to expel the pupil who has dared to violate the secrecy of the lecture room, by transmitting the report of his discourses to the editors for publication! He next enters into an elaborate argument, to satisfy the members of the Council, that the publication of surgical lectures is in itself an undoubted evil. In the first place he contends, that if pupils are led to believe that the information, to obtain which they visit the lecture room, can be procured by the purchase of a *cheap* publication, it will follow that the lecture room will be entirely abandoned.

In the next place, Mr. Green is of opinion that a lecturer who knows that his daily discourses will be placed before the public, will necessarily withhold many points of information, which he does not wish to diffuse amongst the general mass of the community; and that therefore the class will suffer more or less from the justifiable delicacy of the lecturer. But we cannot dwell upon this foolish and ill-advised document; and we lament to see a man of Mr. Green's repute, such as it is, in his profession, condescend to such trifling as altogether distinguishes his unfortunate letter to the Council.

Now the case which we on our own part, have to offer in answer to or in explanation of this strange proceeding of the Professor of Surgery at King's College, lies in a very narrow compass. To the statement which we have to make, we call the particular

attention of the profession at large—of the Council of the college in question,—of the professor himself, but more especially of that body of ingenuous and open-hearted young men, who have entered to Mr. Green's surgical lectures in the present season, and who are but too apt to be led away by the imposing manner of an experienced tactician.

We do not hesitate for one moment to declare our deliberate opinion to be, that the pecuniary fruits of the united labour, industry, research, peculiar opportunities, and experience, which Mr. Green has brought to the preparation of his Lectures, as delivered in the King's College at this time, belong to Mr. Green, and to Mr. Green alone. Never shall we gainsay, by word or deed, this deliberate declaration, and never have we meditated a single step that could be considered as inconsistent with it. The day after Mr. Green had written to our publishers, a principal colleague of ours, Dr. Ryan, waited on that gentleman; and from the handsome terms in which Mr. Green has spoken before his pupils of Dr. Ryan's behaviour during the interview, we are relieved from the necessity of making any further comment upon their meeting. It is sufficient for us to state, that Mr. Green repeated his objections to the publication of his lectures; and that Dr. Ryan heard with attention and respect the declaration of those objections. Such being the state of things, we formed our determination as to the course we should pursue, but of which we shall now say nothing, as the subsequent conduct of Mr. Green has totally disconcerted our arrangements. Will it be believed that Mr. Green, without waiting for the result of his remonstrance, addressed to us, without the slightest consideration of the possibility of our being sorry for a supposed error, and of our resolution not to repeat it; Mr. Green, we say, rushes to the lecture table, and in the presence of

some students and a number of strangers, collected together at his lecture hour, denounces this Journal and its editors; charges the latter with *dishonesty*, and invokes his powerful employers to assist him in punishing what he calls our delinquency. Dishonesty! forsooth. We fling back the imputation in the teeth of our rash accuser; and if we do not add "with contempt," it is only because the phrase falls far short of conveying the disdain which we feel on this occasion. Dishonesty, indeed! and the foul and infamous charge to come from such a quarter, too! We tell Mr. Green that, at all events, we would venture to compete with *him* as to our respective claims to integrity of character, and to fair and honourable dealing; provided only that he will consent to call some of the surgeons of Guy's Hospital to give evidence on the trial.

Every man of right mind—every man who possesses a judgment that is above being influenced by the contemptible seductions of gaudy trappings about his person, will, at once, acquit us of any design to interfere with Mr. Green's rights over his lectures. What sort of bunglers must we be, if, having such an object in view, as the appropriation of Mr. Green's property, in his lectures, we should actually commence the execution of our scheme of depredation, by publishing a very brief selection from one, of about seventy, of those lectures—and that one delivered in the fourth month of the course. Had we commenced with his opening lecture—had we consecutively inserted the discourses which he successively delivered to his class—had we even given the substance of them in regular order, Mr. Green would then be authorized to charge us with dishonesty. But when nothing approaching to such an usurpation of other men's rights can fairly be imputed to us, when we do no more with Mr. Green's literary property than the

laws and usages of our country amply justify, under the circumstances, we feel that we have a claim to a perfect exemption from the censure of any person whatever. Both the law and the custom of the country have now given to a lecturer that extent of right over his discourses, which is enjoyed by an author over his books—and this is but equal justice. Let the lecturers, then, be content to be on a par with authors, and let them beware how they seek peculiar immunities for themselves.

Authors are protected in the exclusive possession of their copyrights; that is to say, no person, without their authority, can re-publish on his own account the work of another. But what author has ever complained of *selections* being made from his book, and transferred to other publications? Is this not the practice which we daily and hourly witness? Are not our reviews almost principally made up of avowed extracts from the writings of men whom the reviewers neither know nor are ever required to consult? Now, what more have we done with respect to Mr. Green, than is sanctioned by the custom which we have mentioned? We have published a brief extract from one out of about seventy of his lectures; and we solemnly declare, that it was not our intention to exceed something like that proportion in any future selection we should make from his course. In publishing his lectures at all indeed, we were guided by far different motives from those which he has so inconsiderately imputed to us. We imagined, that by giving a "local habitation" to some of those observations of the Lecturer, which might be supposed to be most worthy of their permanent attention, we should afford a medium of instructive reference to those pupils, whose true interests in whatever place they give their attendance, we shall always feel it one of our first duties to promote. Such was the object which we had in view when we sought for a report of Mr. Green's

lectures; and anxious as we were to carry that object into effect, we were still determined to regard, with sacred respect, the just rights of the lecturer. A little further acquaintance with what has passed in the lecture-room of King's College, made it clear to ourselves that from us, at least, the proprietor of those lectures had very little indeed to fear—for, as we proceeded with the course, we found, that however pleasing were the manner and address of Mr. Green—however harmoniously his periods sounded to the ears of inexperienced persons—still, when we began to consider the matter of his lectures, deprived of such favourable accompaniments, there appeared, to our judgment, to be a sad deficiency of that interest and value which, during their delivery, his hearers were prone to ascribe to them. We do not state it as a cause of complaint against Mr. Green—far from it—but, nevertheless, we must declare the truth—that his lectures are exclusively calculated for an audience which is merely in quest of the first rudiments of the surgical art. That they contain very little that is novel, except what is wholly useless, and that that large proportion of his discourses, which must be allowed to be instructive, is certainly very far from being new. In truth, we must *honestly* declare, that the avuncular partialities of Mr. Green are quite as intolerable as the nepotism of any uncle of whom history makes mention. To hear him, one would suppose that there was no other surgeon in existence, from the days of Esculapius to the present hour, but his "Uncle Cline." "Uncle Cline" performed this operation—"Uncle Cline" undertook the other experiment—"Uncle Cline" laid down this sage maxim—and "Uncle Cline" recommended that mode of treatment. No man, in fact, in our time, is fit to hold a candle to "Uncle Cline." Lord! such a slaughter as "Uncle Cline" used to make of

dogs, to see if their spinal marrow, after being divided, would reunite! The bare recital of his experiments would make every hair on the head of every member of the Cruelty to Animals Society stand on end for the remainder of his natural life.

It will be perfectly apparent to every observing man, that the consecutive publication of Mr. Green's lectures, with the notions which we entertain respecting their merits, could never have formed any part of our project. We know better than to attempt to gratify the tastes of our readers by serving up "Uncle Cline" at breakfast—"Uncle Cline" at dinner—"Uncle Cline" at supper—and "Uncle Cline" at lunch; unless we ventured to curtail the lectures of the professor of surgery at King's College. Need we say, then, how readily we were disposed to consult Mr. Green's feelings in putting a stop to the publication of his lectures. This we were certainly prepared to do, were it not for the unexpected, the very unusual, the very coarse, and we will add, unjustifiable, proceeding to which Mr. Green had recourse pending our negotiations with him. His conduct at once relieves us from the observance of every form of delicacy towards him; and we have no hesitation in proclaiming it to be our deliberate intention to publish, in defiance of his ostentatious threats, his lectures in such quantities as are consistent with our sense of what is due to Mr. Green.

In this very number we have thrown down the gauntlet to this gentleman; for we were anxious to apprise him, in as short a time as possible, of the very peculiar influence which intimidation usually produces upon our minds. We challenge him, then, to make good his threats: we give him notice that next week we shall insert a continuance of the lecture which appears in our present number: not indeed, we candidly confess, with the hope of either instructing or edifying

any portion of our readers, but for the simple and useful purpose of bringing about the decision of a question of great national importance. Most willingly do we, therefore, anticipate an appointment with Mr. Green, within the precincts of the High Court of Chancery; where, it is our sincere prayer, that the cause of truth, of justice, and the legitimate interests of our profession may be triumphant.

Mr. Green's extraordinary Quixotism, has compelled us to devote to it much more space than it deserves; and obliges us most reluctantly to exclude many original communications. But as it involves a matter of immense importance to the LIBERTY OF THE PRESS, "THE PALLADIUM OF OUR LIBERTIES," indeed the best interests of every man engaged in the cultivation of medicine, we would be highly culpable in allowing it to be assailed through us, without *an ample defence*.

To this subject we shall recur in our next number; and in the meantime we deem it of importance to state, that the lectures of Mr. Green's, of which we propose at present to make use, were in our hands previously to the date of Mr. Green's public prohibition.

Public Health.—There is a peculiar constitution of the atmosphere now prevalent, possessing a great depressing power on the human body. The type of fever is extremely low; and there is an epidemic erysipelas, which manifests itself to a vast extent in the wards of the metropolitan hospitals. It has deterred some of the surgeons of St. Bartholomew's and St. Thomas's Hospital, from performing operations unless in extreme cases. It is to be feared, that the season indicates the approach of cholera, and almost the certainty of its prevalence during the summer or autumn.

WESTMINSTER MEDICAL SOCIETY,

Saturday, February, 4, 1832,

DR. SIGMOND, PRESIDENT, IN THE CHAIR,

Extraordinary Anatomical Machine.

MR. COSTELLO asked permission of the Society to describe the most extraordinary representation of the human body which was ever invented, and which was not more astonishing in its structure than useful in its results, as it wonderfully facilitated the study of anatomy. He was bold to state that the originality, beauty, accuracy, and extreme fidelity of this piece of mechanism, in resembling every part of a human body, would receive the unanimous applause of the meeting. It was the production of Dr. Auzoux, of Paris, and was considered worthy of a prize, by the Royal Academy of Medicine of that city. It illustrated the muscles, nerves, arteries, veins, organs in the head, chest, and abdomen; and allowed the separation and reunion of the minutest parts. It enabled the student to acquire, in one month, more knowledge of the form and position of the minute organs, than if he had been twelve months in a dissecting room. He, Mr. C. had been engaged for twelve years in the prosecution of anatomy; but had this great invention existed in his time, he was convinced that three-fourths of his labours might have been abridged. A person, a stranger to anatomy, could, by studying this model, in three months acquire a knowledge of the muscles, layer by layer, the arteries, veins, nerves, lymphatics, with a complete view of the parts concerned in regionary or surgical anatomy; a knowledge of every part of the brain, medulla oblongata, medulla spinalis, the nerves of the senses, of vision, smell, hearing, taste, the great sympathetic and other nerves, a complete

view of the arteries of the eye, nose, mouth, pharynx, larynx, lungs, heart, diaphragm, abdominal and pelvic viscera, and vessels, with the structure of the superior and inferior extremities. Permission was granted to Mr. C. to introduce the subject. During the removal of the artificial box, from its case, which occupied some time,

Dr. Gordon Smith rose, and said, that though a visitor, he should take the liberty of directing the attention of the meeting to a subject which had been noticed this day in one of the medical journals; and one which, sooner than insert it, had he been the editor, he would have burned his right hand to a cinder. He could not name it at present, but would do so at another society on Monday evening. Great impatience was shewn by the society, and several cries of—name, name—proceeded from different parts of the room,

Dr. Ferguson rose to order, and objected to the course pursued by Dr. Smith; as he must contend that, unless the subject concerned the society, it was irregular to introduce it. He believed it referred to a theological discussion at another society, with which the present meeting had nothing to do, as they were medical men, and not theologians. He thought such discussions highly improper in scientific societies.

Mr. Gilbert Burnett followed on the same side, and moved that Mr. Costello proceed with his demonstration.

Dr. White thought Dr. Smith ought to be heard, if his subject concerned the society and the profession.

Mr. Costello, however, commenced at the general call of the meeting, and gave a concise view of the difficulties that always impeded the progress of anatomy, which compelled its cultivators to resort to the dissection of inferior animals—a proceeding interesting in itself, and one which introduced the study of comparative

anatomy. He deplored the impediments which still exist in this country to the cultivation of anatomy; but he confided in the wisdom of the legislature to ameliorate our condition, and put an end to that horrible system of supply of dead bodies, which no class of society could condemn in stronger terms than the medical profession. Whatever might be the law on the subject, it was obvious that difficulties will exist, for a long time, to arrest the progress of anatomy, in these countries; and he had, therefore, sincere pleasure to request the attention of the society, and the whole profession, to the advantages offered by a species of substitute for the human body, which he would place before the meeting. His friend, Dr. Auzoux, had spent eight years in constructing it; and he ought to mention that this gentleman, and his distinguished preceptor, Dr. Civiale, were contemporaries in their studies; that each cut out a separate path for himself, and each laughed at the other as a fool; though the results of their respective labours were of immense benefit to humanity and science.

Mr. C. then exhibited an arm of the machine, which bore the closest resemblance to that of the human subject; he demonstrated the deltoid and all the muscles of the shoulder, which were instantaneously detached by M. A. as he proceeded. M. Auzoux then removed the muscles of the fore-arm, one by one; shewed the vessels and nerves; removed the palmar fascia, and exhibited the tendons attached to the fingers, in a form so natural, that a burst of applause followed.

The body was now placed in the erect position, with Mr. Costello on one side, and M. Auzoux on the other. The former described the muscles and vessels of the neck, while the latter removed each part with great rapidity. The demonstrator proceeded to the face, mouth, nose, pharynx and larynx, pointing out the

minutest nerves, arteries, and tissues of those parts. He next exhibited the brain, and described it after the manner of Gall; shewing the origins of the nerves, and every part of the organ. He now demonstrated the medulla oblongata. The thorax was next examined, and on the removal of its anterior parietes, a general burst of applause ensued. The illustrations of the great vessels were really astonishing. Mr. C. next described the heart, in the minutest manner, after the manner of Bichat.

Dr. J. C. Somerville rose to enquire whether it was the wish of the society to be further amused by the continuation of this demonstration, as he and many others came to hear a discussion.—The general sense of the meeting was in favour of the demonstration, and a good deal of disapprobation was excited by the interruption.

Mr. Costello resumed, and proceeded to remove the stomach, diaphragm, liver, spleen, and intestines, all of which were graphically delineated. He then adverted to the thoracic duct, great sympathetic nerves, aorta, and all its branches; iliac and pelvic vessels, and the anatomy of the femoral vessels. [During his description, there was a member, whose name was not mentioned, whose ironical cries of hear, hear, excited the contempt of the majority of the meeting, and whose want of courtesy towards the demonstrator was more than once remarkable. Such conduct would not be shewn in a medical society in Paris, towards the contribution of an ingenious foreigner.]

In conclusion, Mr. C. observed, that the young French gentleman who separated a part of the machine, had acquired such a knowledge of anatomy, that in three months he excelled students who had been dissecting for a year. He observed that there were three sets of marks on some of the parts, numerals, capitals, and small letters, which had reference to the

origin, insertion, and relative position of organs; and which were calculated to enable the student to become rapidly acquainted with these requisites. He concluded by referring to the chaotic pile of organs on the table, in proof of the validity of his assertions in the early part of the evening.

Mr. Chinnock rose to propose a resolution, which he had no doubt would be unanimously carried, that the warmest thanks of the society be communicated to Dr. Auzoux, for his politeness in submitting his truly astonishing piece of mechanism to the meeting.

The President addressed Mr. Auzoux, and complimented him in high terms on his singular and important invention.

M. A. replied in his own language, and regretted his inability to address the meeting in English, but requested his friend Mr. Costello to do so. A vote of thanks was then given to Mr. C. for his having honoured the society by introducing this singular invention to its notice, before it was exhibited to any other institution of the kind in this country.

Dr. Somerville requested to apologize for the interruption he had given in the early part of the evening; but he was led to do so, from the vivid description of Mr. Costello, which was calculated to lead us to suppose that human dissection was unnecessary, as anatomy could be studied on this machine. This was the opinion of many newspapers, and of the *Morning Herald* in particular; an opinion to which no medical man could subscribe.

Dr. Ferguson fully concurred with Dr. S., but should contend, that the study of anatomy would be very much facilitated by this great invention. It was of infinite value, where there was a paucity of subjects; and he considered that surgeon apothecaries should possess it, as it would enable them to instruct their pupils in anatomy, during their apprentice-

ships. In saying this, he wished it to be understood, that he did not speak invidiously, but as large premiums were paid, he thought the pupils should be instructed as much as possible. He was not unfriendly to any class of the profession, indeed, he almost regretted he had taken a degree at all.

Dr. Blicke really saw nothing new in the invention, as the self same was exhibited thirty years ago in Germany and Florence.

A Member observed, that he had studied in both countries, and had never seen any thing of the kind. He had seen splendid wax models, in glass cases, but nothing resembling the curious and unique specimen before the meeting.

Mr. Hunt highly applauded the inventor of the machine, but could not admit it to be a substitute for anatomy. He should be sorry to allow a person who studied on it, to operate upon him or any of his friends. Mr. Brookes, his old master, had used wax models many years ago in his lectures. He could not agree that apprentices were neglected; he was of opinion, they could not be better instructed than they were at present without this invention. Dr. Webster asked the price of this machine, and was answered £120. He therefore thought it was not accessible to students [to which several members simultaneously replied, it ought to have a place in every medical school in the united empire.] The meeting then adjourned.

We understand that Sir Astley Cooper has promised to have a specimen in the Hunterian Museum. The original may be seen daily, free of expense, between one and two o'clock, at 3, Leicester Square.

The following approval from the Royal Academy of Medicine, in Paris, will shew the value of the invention, if farther proof be required. A commission was appointed, May 10, 1831, consisting of MM. Adelon, Dubois, Cruveilhier, Breschet Clo-

quet, &c. to report upon this machine, and they proceed as follows.—“In 1822-23-25, M. Auzoux had submitted to the Academy, different specimens of artificial anatomy, representing many parts of the body. He executed his figures in a kind of paste, which when fresh, might be moulded into any shape, and was susceptible of the most delicate impressions. When dessicated, it became as hard as wood. They have carefully examined the parts and specimens, and think the author entitled to great praise for his zeal, ingenuity and patience; while they consider his discovery of singular importance, and highly deserving of encouragement from the Government, as France has now the advantage of surpassing all other countries in the art of anatomical imitations. Their opinions are corroborated by the fact, that the public establishments of many countries have already possessed themselves of these representations. The eulogies of the academy, and the avidity of strangers, have given a new ardour to their *confrere*.

After many years of labour, M. Auzoux submits to the academy a new piece of anatomy, which is brought to the highest perfection; while he withholds the *modus faciendi*. He takes the dead body of a person, of five feet six inches in height, and undertakes to represent every part of it, however difficult and minute. His new model is for superior to that of 1825, though that was very ingenious; as he re-produces all that belongs to myology, angiology, neurology, splanchnology and osteology—the last so perfect, as scarcely to be distinguished from the real bones.

The finest and most delicate, as well as the most voluminous parts, the softest and the hardest, the most superficial and deep-seated, are represented with the nicest exactness in form, colour, structure and con-

nexions. The reporters do not deem it necessary to refer to all the details, but only to those in which most attention is fixed by your commission. The heart is re-produced with great success, by means of a section of the inter-auricular and inter-ventricular position, the organ is divided into two portions; on each are two cavities, which open so as to expose the valves. All these parts re-unite with great exactness, there being scarcely a trace of the division, and the whole represent a heart of the natural size. All these vessels are shewn, from their origin to their termination.

The preparation of the head, upon which they find the mouth, pharynx, larynx, nasal fossæ with the muscle, arteries, veins, nerves, which accompany these parts, appears to your commissioners to offer an ensemble, which up to this time has not been produced.

The brain, spinal marrow, and great sympathetic nerve, have been re-produced in all their minute parts, so as to give an exact appearance of the apparatus of innervation.

The model was not, however, quite perfect when first examined; M. Auzoux had fallen into some trivial errors, which were removed with great facility on being pointed out. The machine is now perfect; such is the zeal of our *confrere*, every part can be separated and re-united; and the ligaments are so exquisitely formed, as to admit of artificial luxations, as in the recent subject.

The commissioners assure you, of the almost entire realization of your hopes, as well as those of the Royal Academy of Sciences, and of the Society of Emulation. There is no doubt but the artificial anatomy now before them, will considerably abridge and facilitate the study of anatomy on the human body, especially in the topographical parts. But they think with you and the author, that it cannot supersede or dispense with the study of nature on the dead body by

dissection. But it will wonderfully abridge the labours of the student in the anatomical amphitheatre.

M. Auzoux can prepare every part separately; and therefore, enable students and provincial surgeons to possess whatever parts they desire. This is a great advantage to practical surgeons, who can study the relative positions of vessels and nerves, before they commence their cutting operations on the living body. These preparations are a great resource for public demonstration. In secondary schools there is often a want of subjects; and though the professor is obliged to destroy important parts, in tracing a vessel or nerve, a waste that can be remedied by this machine. A natural repugnance to the study of anatomy exists in the minds of those out of the profession. Nevertheless, all must admit its utility; and this is perceived by the Prince whom France has placed on the throne, who wishes his son to study anatomy.

The commissioners recommend your thanks to M. Auzoux, and the transmission of this report to the Minister of the Interior, in which they strongly advise these anatomical preparations to be placed in all the Royal Colleges, in all secondary Medical Schools, and in all public establishments. (*Signed by the above.*) The Academy adopted this report and its conclusions. The commissioners, however, forgot to notice the great utility of these artificial anatomical preparations in warm climates, in which dissection cannot be practised without great danger to health. The vast superiority of these over wax, and even dried preparations of the human body, consists in their durability and solidity, which withstand a great degree of force, even when applied by solid bodies. The inventor is now engaged in arranging a skeleton with the ligaments and representations of women at the different periods of life; also at the different epochs of utero-gestation.

Such are the features of this grand

invention, and need we say, how valuable they are to the cultivators of anatomy in these countries? We have carefully examined every part of this most extraordinary production, and add our testimony in support of the conclusions of the French Commissioners. We are convinced of the vast utility of this machine, and of the great assistance it affords the anatomical student, and indeed to every man engaged in the healing art. We have no hesitation in declaring that it should have a place in all our universities, English, Irish, and Scottish; in all our Medical Schools, both public and private; as it is by far the simplest and easiest means by which a student can become practically acquainted with the construction of the human body. It is well calculated to enable him to follow his teacher in his demonstration of the dead body, and possesses all the advantages detailed in this article. It is the finest piece of mechanism ever devised; it faithfully represents the complicated and harmonious machinery of the human body, which far exceeds that of all other animals, and of all other mechanical contrivances that can ever be invented by human ingenuity.

Hospital Reports.

ST. THOMAS'S HOSPITAL.

A Case of Diseased Heart.

JAMES HARPER, a currier, aged 29, admitted into this Hospital Jan. 26, in Jacob's Ward, under the care of Dr. Elliotson, states that he has been ill for some time, but that his symptoms were only urgent within the last two weeks, and that he was first attacked with œdema of the lower extremities, there is a great impulse of the heart, with bellows sound on the left side, synchronous with the pulse; a crepitus is heard at the back part of the chest on both sides, a great difficulty of breathing, and a dull sound

on percussion to a great extent on the cardiac region

Ordered to be bled to a pint, and to take six grains of calomel every night, and an ounce of the supertartrate of potass every morning. 31st, shortly before he was visited by Dr. Elliotson, he was seized with pain across the chest, with an increased difficulty of breathing, pulse 96, scarcely perceptible, extremities cold, ordered ten ounces of blood to be taken from over the region of the heart by cupping glasses immediately. He appeared somewhat relieved after the cupping, but afterwards gradually sunk, and died the next morning at 9 o'clock.

His friends would not allow the body to be examined.

Abscess of the Liver, Discharge of Four Quarts of Pus by Puncture.

JOHN EVANS, aged 28, was admitted into this Hospital January 5th, in William's Ward, under the care of Dr. Elliotson; states that he has been a sailor, and for five years engaged in voyage to and from the West Indies, and for the last five years has been trading between London and Bordeaux. Complains of having been ill for five months, and attributes his complaint to his having been exposed to cold and inclement weather. He was first attacked with a bilious vomiting, and an acute pain in the right hypochondriac region, his whole surface becoming of a saffron hue; there is a great circumscribed tumefaction over the hepatic region, extending to the umbilical region, with fluctuation at the lower part of it. Pulse full and irregular.

Twenty leeches were ordered immediately to be placed over the region of the liver.—And five grains of calomel to be given every night, and this to be followed by a dose of castor oil.

6th. Continues the same.

A linseed meal poultice ordered to be applied to the abdomen, and six grains of calomel to be given every night: to be kept on milk diet.

11th. Complains of very acute pain over the region of the liver.

Twelve leeches were ordered to be applied immediately to the part affected, and one grain of opium to be taken; five grains of calomel to be continued twice a day.

14th. Appears somewhat easier, but still complains of great pain over the abdomen, very much increased by pressure. The same medicines to be continued.

16th. Continues the same. *Ordered six grains of calomel, to be taken three times a day.*

20th. The patient's health is a little improved, and there is an evident fluctuation over the tumefied region of the liver. A puncture was made by Mr. Green, at the lower part of the umbilical region, from which four quarts of a thin and highly fætid purulent matter escaped. Since the operation the patient has been much easier, and can lie down without pain.

24th. Complains of great weakness, the pulse rather full, soft, and easily compressed.—*Ordered arrow-root and two pints of milk daily.*

There has been a discharge of hydatids from the puncture.

29th. Appears to be gradually sinking: still complaining of great pain or pressure over the whole abdomen. *Ordered three grains of opium to be taken immediately, and half a pint of wine, daily.* If the pain should increase, the wine to be diminished.

28th. Being very urgent in his request to leave the Hospital, his wife removed him.

He died on Monday the day after his removal, at 2 p. m.

Post Mortem Examination.

Strong adhesions of the liver to the surrounding viscera; the liver considerably enlarged, especially the left lobe, which was full of small collec-

tions of fætid pus, and the surface of a dark colour, the right lobe almost entirely degenerated into a large abscess filled with numerous hydatids, its proper substance forming a large and thin cyst. The gall bladder empty.

The other viscera were not examined.

Dr. Elliotson remarked that this case closely resembled one described in Dr. Baillie's *Morbid Anatomy*.

MISCELLANEOUS.

DR. HEWETT, of Downing College, Cambridge, has been appointed Physician Extraordinary to the King.

Effect of Lightning.—On the 4th of last month, on her way home from Lisbon, the British man of war, the *Despatch*, was struck by lightning during a heavy squall. The electric fluid descended by the wet ropes about the main-top-mast, and the main-top-sail sheets, and discharged itself in the waste of the ship, inflicting injury more or less on twelve of the persons on board. The feeling experienced by the men affected was a burning heat, succeeded by a sensation of extreme cold, and numbness, with abrasion of the parts so affected. Some had the cuticle of their extremities seared as from the application of a powerful escharotic; but all had the nerves of volition or sensation of the parts struck, more or less violently affected, which for some time deprived them of voluntary motion and feeling. A few complained of giddiness and violent pains in the head, whilst the respiration of others was difficult and laborious.

Cure for Acute Rheumatism.—Mr. Cox, in his very interesting travels in the territory adjoining the Colombia river, recently published, gives an account of the method of curing acute rheumatism amongst the Indians, the good effects of which he experienced in his own person. An old Indian

prevailed on him to visit a river early in the morning which was covered with ice, and in which he made a hole to receive himself and his patient, both stark naked. Whilst there the Indian *shampooed* Mr. Cox for some time. The result of the first trial was so agreeable, that the patient returned to the doctor and the ice-bath every morning for twenty-five times, and declares that he has never since been troubled with the slightest rheumatic pain.

Vaccine Virus.—We have authority for stating that the able and active Director of the General Post Office, Sir Francis Freeling, Bart., has in the kindest manner expressed his intention of sending by post, free of expense, any reasonable quantity of vaccine virus, provided it be exclusively for the poor.

Natural History of Man.—The late Mr. Hope, so well known as the author of that powerful work, "*Anastasis*," has left behind him a production on *Cosmogony*, which has excited a great deal of interest. His theory of the origin of man, of which we present a slight outline, may be regarded as a specimen of those curious results which inquiries in science will generally produce, when these inquiries are conducted by men possessing great natural talents, learning, and experience of the world, but who are destitute of the scientific acquirements which would enable them to select the right path of investigation, as well as to take an accurate view of the facts which they observe.

"When, in the progress of creation, the elements of organised substance, by successive combinations and decombinations, had arrived at a condition suited to the formation of beings, not only vital and sentient, but intellectual, these elements, meeting from opposite points by pressure, gradually accumulated and combined, until they resulted in man! This process going on simultaneously wherever the elements are to be found, it follows, that every

part of the world so circumstanced was in a condition to produce its own human formations. The genus man thus comprises distinct species, each proceeding from its own peculiar parent stock, discriminated one from the other by a comparative scale of excellence, both in physical and intellectual capacity; the former, if not determining the latter, at least being its unerring index. Between these several races is a boundary, not only distinct and well defined, but impassable; so that a Caffre or a Samoyed could no more, by whatever pains in education or discipline, be elevated to the comprehension of European science; than the dullest of brutes be trained to the sagacity of an elephant!!"

Due Appreciation of Medical Men.

—At a time when the motives of the medical profession are so industriously made the subject of ridicule and abuse, we are happy to have to record instances in which the disinterested services of the faculty have been adequately estimated. We learn from a correspondent in Exeter, that at the last annual meeting of the supporters of that extensive institution, the Exeter Dispensary, it was proposed and agreed to, that the medical officers, Dr. Hennis and his coadjutors, should receive some substantial testimony of the gratitude of the subscribers. It was observed by one of the proposers (Mr. S. Mortimer) that to reward the medical gentlemen as they deserved, he knew was out of the power of any human beings, as usefulness such as theirs could not be appreciated by money. It was, indeed, of a rare and singular kind, as so far from self having any influence in it, they, on the contrary, must have credit for acting in opposition to it, since their private practice could not but be in a degree injured by the establishment of such an institution as the Dispensary. He repeated it, that for services such as they had rendered, it was not in the power of their fellow men to offer anything like an adequate re-

ward; but deeds such as these had a faithful registry elsewhere; and though not to be rewarded as they deserved in this world, they most assuredly would in the next.—(*Applause.*)

The March of Anatomy.—Mr. Cowland, of Chelmsford, not in the profession, but known to the public as author of "A Spark to Illumine," has just made his will, in which he directs that two days after his decease, his body shall lie for four days, three hours in each day, at his dwelling-house, for such surgical operations as the resident medical gentlemen may think fit; with permission for every practitioner in the medical department, residing in that town and vicinity to attend; but no other person, except his relations and executors. On the last of those days, the surgeons shall place every particle of his mortal remains in a coffin for interment, and on the following day, in the church-yard of Chelmsford, with the usual funeral rites. The better to insure his wishes being carried into effect, he has chosen a surgeon for one of his executors.

NECROLOGY.

On the 11th ultimo, at Preston, John Gilbertson, Esq. surgeon, in the 41st year of his age.

On the 14th, at Oldham, James Cocks, Esq. surgeon, in the 63d year of his age.

On the 18th ultimo, at the Green Bank Hotel, Falmouth, aged 21, Mr. Thos. Hale, surgeon, son of Mr. Hale, Bradford, Wilts; and Jan. 20, Mr. Colquhoun, aged 20. These young men were on their passage to Madeira, for the benefit of their health, but owing to the severe gales in December, the ship (Ruckers) was obliged to put into Falmouth in distress.

On the 28th ultimo, at Lichfield, Trevor Jones, M. D. in the 80th year of his age.

On the 16th October, at St. Elizabeth's, Jamaica, Mr. Frederick Whiteley, surgeon.

Dr. Hall, a respectable physician, St. John's, in North America, lately fell a victim to his solicitude for one of his patients. He was returning from a visit in the night, in a vehicle, called in his country a cariole, and was frozen to death. The poor horse nearly shared the same fate.

In the parish of Lanark, Scotland, on the 13th ultimo, Archibald Howison. The death of this excellent man merits commemoration in this Journal; first, because he was raised from the lowest walks of life (having been a stone mason) by the liberality of Dr. Howison, who made him his heir, and, in the next place, because the last act of public charity, by which he endeared himself to his country, was the gift of £10. in cash, a live bullock, and a cart of turnips, to the Lanark Board of Health, for the use of the poor.

BOOKS RECEIVED FOR REVIEW.

ELEMENTS of Diagnosis, General Pathology, and Therapeutics. By Robert Norton, M.D. M.R.C.S.

Obstetric Medicine, its Principles and Practice, in a Series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children. By David D. Davis, M.D. Professor of Midwifery in the University of London. Part II. with Three Plates.

Elements of Practical Pharmacy. By Robert John Kane, Professor of Chemistry to Apothecaries' Hall, Dublin. 12mo. bds.

Dr. Quain's Lecture, Introductory to the Course of Anatomy and Physiology, delivered at the opening of Session 1831-2.

An Inquiry into the Medical Properties of Iodine, more particularly in Dropsy; also, an Account of the Utility of Local Blood-letting in Hydrothorax and Bronchitis. Partly translated from the Latin of T. L. C. Schröder Van der Kolk, Med. et Art. Obs. Doct. Medico. in Nosocomio Amst. Clodamensis suburbano. By C. J. B. Aldis, A.B. Trinity College, Cambridge.

A Complete Exposition of the Methods hitherto adopted for procuring Subjects for Dissection, with a Plan for supplying the Anatomical Schools in future, so as to effectually prevent the repetition of the horrible crime of Burking. Contained in an Address to the British Public. By a Practical Anatomist.

On the Phenomena of Dreams, and other Illusions. By W. C. Dendy, M.R.C.S., &c. 18mo. pp. 154.

Hints on the Constitution of Dispensaries, with the view of their being rendered of more extensive benefit to the labouring Population. By John Storer, M.D. F.R.S. M.R.S.L., Consulting Physician to the General Hospital near Nottingham. Hatchard and Son, Piccadilly. 1832. 18mo. pp. 92.

NOTICE TO CORRESPONDENTS.

WE feel great gratification at the immense number of complimentary and laudatory letters we received during the week, approving of our labours and prophesying success. It is utterly impossible for us to reply to one half of our correspondents in this number, but every friendly suggestion shall be attended to. Communications have been received from Dr. Gordon Smith, Dr. Henry of Manchester, Mr. Eager of Paris, Professor Burnett, Dr. Mann Burrows, Mr. Evans Riadore, Mr. Dewhurst, and Professor Green, of King's College.

We have been obliged to defer the insertion of many communications from press of matter.

Dr. ——— is quite right, the Blueness of our contemporary was *ad captandum*. It will never do; there must be something a little more useful.

Dr. C.—— Cheap literature is the order of the day, and why exclude it on medical science. We take our position on that great feature of our work; and trust to the taste and self-interest of the profession for support. The surest way to enable us to publish the cheapest periodical in existence, is by every one who approves of it taking it in.

It will cost merely half the expense of our contemporaries, and the buyer may as well save his money.

Longman's Green Advertiser is in articulo from congestive cholera. A great struggle must be made in the shape of extensive advertising. The thing only lingered for the want of something better. The publishers were so panic struck at the announcement of our first number, that they refused inserting our advertisements!!! They foresaw the sudden death of their bantling. They were quite right. Many of their subscribers have already cut them, and several will finish the present and last volume, which is now near its end—Now, reader, mark our generosity, our great liberality in inserting this advertisement, without remuneration.

Several of the subscribers to the Farmer's Medical Journal have also found their way to 356, Strand—Every one exclaims to us "success is certain," "go on and prosper."

THE

London Medical and Surgical Journal.

No. 3.

SATURDAY, FEBRUARY 18, 1832.

VOL. I.

King's College.

SELECTIONS FROM

THE SURGICAL LECTURES,

Delivered by

BY J. H. GREEN, Esq., F. R. S.

In the Session 1831—32.

Fractures of the Cranium with depression.

GENTLEMEN,

WHEN you meet with a case of fracture of the cranium with depression, are you or are you not to trephine? In almost all cases of injury to the head, it was the practice of the old surgeons to have recourse to the operation. But Dessault very materially improved this department of surgery, and never used the trephine, except in cases where he was satisfied that there was extravasation of blood, or a depression of bone. Modern surgeons have gone farther, however, than this, for they have abstained from the employment of the trephine, even in cases of depressed bone, in which no symptoms of compression were manifested. This latter practice carries with it a very reasonable appearance—it sounds very rationally. Now other surgeons have, as it were, split the difference between the two opposite doctrines, and have said that they would not trephine simply because symptoms of compression were present, but only in cases of compound fracture of the cranium. But all these distinctions may well be characterized as mischievous refinements; and I say this, notwithstanding that I am aware of the existence of cases of fracture with depression, in which the operation was not performed, without any bad consequences resulting from the omission. My uncle, Mr. Cline, used to mention the case of a man who was brought to St. Thomas's Hospital, with an ulcer of the leg. Whilst he was under treatment for this complaint, it was discovered

that the patient had had an injury of the head six months before his admission, and that there was actually at the moment fracture with depression of bone. I need not say, that notwithstanding this extensive injury, no symptoms of compression existed, nor was there the slightest alteration in the cerebral functions. In addition to this case, I may mention, that Mr. Abernethy has published seven cases of fracture with depression, in which no operation had been performed, and all of which did well. But in these cases the depression was uniformly slight, and the patients were all young.

Now, gentlemen, I state these facts and cases to you, in order to show that I am aware of the instances that are recorded, in which the operation of trephining has been omitted, when fracture with depression has occurred, and that too with perfect impunity. I must, however, say, that as a general rule, I would hold, that in cases of fracture with depression, the operation of trephining cannot be omitted, without the hazard of the most fatal consequences to the patient; and for the simple reason, that in such a case of injury, you have the hard rough edge of a piece of bone pressing against the dura mater, and if that force be not removed, you will almost certainly have inflammation and suppuration, to which the patient will sooner or later fall a victim. Illustrations of the effects of the two opposite modes of treatment may easily be found. Thus it happened, that two men were admitted on the same day into St. Thomas's Hospital, each having met with pretty nearly the same accidental injury, namely, fracture of the cranium with depression, attended in each instance with symptoms of compression. Now here was an occasion which admitted of a fair trial of the ordinary means of relief. A proposal to use the trephine was made to each of the patients. The one submitted, but the other declined. The man who underwent the operation very speedily got well, but the other patient, in the course of the week, began to manifest symptoms of inflammation within the cranium—he became delirious,

In this state the operation was had recourse to, but without avail, for the inflammation had proceeded, and the unfortunate man fell a victim to its violence. And such, gentlemen, is uniformly the case in my own experience. When inflammation is once established in the brain, or its membranes, no possible benefit can be obtained from the employment of the trephine: the inflammation will go on, and will certainly prove fatal to the patient.

From a consideration of the progress and termination of these cases, and of many which are upon record, I would lay down as a conclusion, that the only cases in which you can with propriety omit the operation, is in those of fracture with depression, in the young subject, or in cases where the depression is slight, and unattended with symptoms of compression. In all other cases, whether there be a wound of the scalp or not, and though there be no compound fracture existing, I would perform the operation—I deem it to be an essential point to raise the portion of bone which may be depressed. This is the practice which I would advise you to adopt, and I dare say that, after you have had experience of its utility, you will thank me for the recommendation.*

It is really wonderful how long the brain may remain compressed, and how long symptoms of compression may exist, and how easily, under such circumstances, any operation performed at a period long subsequent to the injury, will lead to the recovery of the patient. This I am ready to acknowledge militates against my own doctrine. But the

case on which the statement rests is quite unique, as far as I know; it occurred under Mr. Cline. One of his apprentices was visiting the dépôt at Deptford, and discovered a patient who had, as he found upon inquiry, lain sometime there in a state of complete unconsciousness. The man was removed to St. Thomas's Hospital. His chief symptoms, shortly after his admission, were apparent insensibility to all surrounding objects, and total incapacity to make any communication to those who surrounded him, except in respect of his immediate wants. That he felt hunger was concluded from the grinding of his teeth—that he felt thirst was evident from the smacking of his lips—and it was not to be doubted that he was conscious of the usual provocations to empty his bowels, for he turned on his side to facilitate the evacuations. But here all tokens of his consciousness ended. It was noticed as a peculiarity that his fingers were bent permanently towards the palm of the hand; besides which, his eyes were turned up completely under the upper lids.

In this case, gentlemen, there was a fracture with depression of one of the parietal bones. Mr. Cline employed the trephine; the pain which the operation produced appeared to have been felt by the patient; but after it was concluded, his eyes were turned down, his fingers were restored to their natural position, and on the very evening of the day on which the operation was performed he sat up in bed. He was at first stupid, and was incoherent in his speech; but ultimately he spoke in a rational manner.

When brought completely to his senses, the only thing this patient remembered as having latest occurred was, that he served on board a vessel which had the good fortune to make a capture off Minorca; that he was wounded in the struggle, and after cruising for some time in the ship, was put into an hospital at Gibraltar. The affair happened upwards of twelve months before the operation, and thus it occurred that to this patient one whole year of his existence was in reality a complete blank, because during that interval a little piece of bone was pressing on his brain. I am, I confess, unacquainted with any case in the whole history of surgery, in the annals of physiology, or in any of the reports of the results which have been obtained from the investigations into the human mind, which can be considered as similar to that which I have now described to you.

* No practitioner ought to undertake the operation of trephining without having duly considered the cautions which that able and judicious surgeon, Mr. Brodie, has left for his guidance: "The removal," says he, "of a part of the cranium, is not to be viewed as a trifling matter, or as an operation which we are warranted in performing without sufficient reason. The process by which the aperture in the cranium is filled up with new bone, requires many years for its completion, even where the aperture is small; and where it is large, the process is never completed at all. The deficiency of the cranium must render the patient much more liable to suffer from accidental injury, than he would have been if the cranium had been perfect. The cicatrix must be more easily penetrated by a cutting instrument, and more likely to give way under the force of a severe contusion of the bone itself."

"Without referring to these remote consequences, or to cases in which it has been carelessly or improperly performed, the operation of the trephine is not to be regarded as one altogether free from danger."

"The perforation of the skull, and the removal of a part of it, is attended with a certain degree of danger, and the evidence hitherto adduced, is in favour of the opinion, that it is most prudent to abstain from the use of the trephine, where there is a fracture with depression of the cranium, producing at the time no unfavourable symptoms.---*Medico-Chir. Rev.*, Vol. XIV.

Westminster Hospital.

CLINICAL LECTURE,

Delivered by

G. J. GUTHRIE, Esq. F.R.S. P.R.C.S.

February the 11th, 1832.

On Injuries of the Knee-joint.

GENTLEMEN,

I NOW wish to draw your attention to the case of injury of the knee-joint, I alluded to last Saturday, in which amputation of the thigh was performed, the patient having died on the third day afterwards. These accidents are always of the most serious nature, and deserve your best attention, for if good is to be done, it is to be effected in the first few days after the injury, and if the efforts of the surgeon fail, the result is usually fatal. This kind of injury is one that requires decision on the one hand, and a regular treatment on fixed principles on the other, which I shall proceed to explain. The patient in question was thrown from his horse on the 28th of December last, struck the inside of the knee against a rough stone, by which an opening was made into the cavity of the joint, and the integuments were bruised to a considerable extent. He did not come under my care for the three first days, during which little was done, and the external parts had assumed a sloughing character, accompanied by high inflammation, extending up the thigh to the groin. I directed him to be bled, to have cold applications to the thigh, a poultice to the part, and to take aperient saline medicines. The contused parts all sloughed away, the internal condyle became completely exposed, and I did not hesitate to say that amputation would be necessary, and to predict that the result would, in all probability, be fatal. Matter formed, as it usually does in such cases, without the capsular ligament, and between the muscles of the thigh, extending upwards to the groin, and was discharged on pressure in great quantity. The constitutional derangement became very great, and I soon saw that he would not live to that period of comparative quiet, which has been considered by Mr. Hunter and others, as the best for amputation. This period usually occurs about the fifth or sixth week, but is one and the greatest objection against delaying amputation until that time, that the patient will rarely live until the proper period, if the first and most fitting hours be neglected. I requested the opinion of my colleagues then present as to the propriety of amputating, and in compliance with the wish expressed, deferred it until the Saturday following, the 21st, but without any advantage. The discharge became greater, the constitu-

tional irritation was increased, and diarrhoea supervened, which greatly weakened the patient, and left so little hope of success, that I told him the operation offered only a very doubtful chance of saving his life. It was one which he alone could decide upon taking. I said, I was quite sure he could not live until the ensuing Saturday, keeping his leg on, and that the operation would possibly be a means of destroying him a day or two sooner, if it was not successful. He decided on having it done. You will recollect I told you, before he was placed on the table, that it was not improbable he might die under the operation; that I was fully aware that it was not unlikely, and I desired you not to be surprised if it took place. It is not, gentlemen, a pleasant thing to do an operation under such circumstances, nothing but an imperious sense of duty can make any one do it, and it is not every one who could do it, under such circumstances. It has occurred to me, more than once, to have a patient die on the table, under one of those great operations we were obliged to perform during the war, and no one ever saw a muscle of my countenance change, the slightest tremor of my hand, under such or any other circumstances. The *mens conscia recti*, supported me in these, as on all other occasions. If I have had these painful moments, I have also had those pleasurable ones, arising from the proud feeling of having saved the life of a fellow-creature by the same sort of decision. There is a young gentleman calls on me occasionally, whose thigh I amputated some four years ago for a disease of the knee, under nearly similar circumstances. It was said that he would die under the operation; I recommended his father and mother to let him take his chance, and fondly as they felt for him, devotedly attached as they were to him, they courageously decided on losing him a day or two sooner than they otherwise might have done, or of saving him altogether. Their decision was crowned with success. I cut off his leg, and he recovered without one bad symptom. If, therefore, there be a reasonable chance for his life, always propose the operation to the patient and his friends, and let them decide. If you state your opinion fairly, you can never be blamed; and if you are, depend upon it, no harm will ensue to you, for having done your duty fearlessly, honestly, and to the best of your ability.

You must have observed that the mode of operating was unusual. I cut down to the bone as rapidly as possible, retracted the whole of the parts together, separating the attachments of the muscles from the bone, and cut it very short; four inches at least was left exposed with the knee-joint. After having tied the arteries, and having cut all the ligatures short, I merely brought the parts in contact with three strips of plaster, placed a piece of common dressing over the end of the stump, and left it to suppurate. If union

had taken place, death must have ensued; the only chance of safety lay in a free and healthy suppuration taking place, in due course of time, under which the muscles would diminish and retract, the parts become consolidated, and by using a long bandage at or after this period, a conical stump might be prevented. A conical stump invariably takes place from one to three years after the best possible amputation; but the conical stump, which has not the skin adhering to the bone, gives no pain, whilst the stump which heals by granulation from the bone, is always conical from the beginning, and painful for the life of the patient.

The surgery of injuries of the knee-joint is essentially different from that of the ankle-joint, although it is not very easy to say why it should be so. It is no common injury of the ankle-joint, which renders amputation necessary: the capsule may be torn to half its extent, the tibia injured and broken, and yet the limb may, nay will be in general, be saved. The slightest injury which opens the capsule of the knee-joint is often fatal. In the one case the general rule is never to amputate, in the other always to do it, subject to certain exceptions. Of the great number of injuries of the knee-joint which have come under my observation, I have rarely seen one limb saved, and very frequently not even life, where the condyle of the femur or the head of the tibia has been injured: nay, a lacerated wound of the capsule alone has generally been fatal to one or both.

The treatment then of this class of injuries deserves and requires your strictest attention; every thing must be done within the first two or three days or never. In all cases of injury opening into the knee-joint, and not receiving immediate amputation, the first thing to be done is to place the patient on his back, with the leg extended, as in a case of broken patella, with a padded splint beneath, extending from below the calf to the tuberosity of the ischium. The edges of the wound are then to be brought together, and I strongly recommend stitching the skin, and the skin only, as an old lady would any coarse material, not like a cambric handkerchief, but as she would do any coarse sacking: then apply a short piece of adhesive plaster, a broad compress on each side of the wound, a small long one over it, and a bandage. Keep the limb cold, apply leeches, if painful in great numbers, bleed from the arm, give diaphoretics and anodynes, but not purgatives: your patient must be disturbed as little as possible. The bandage must never be so tight as to give undue pressure. Your little threads may be removed on the fourth day. The inflammation cannot be subdued, and matter forms: you should then give it free vent, and above all take care that it shall not extend up the thigh: raise the body of your patient, and make openings, and deep

ones too, if necessary, or your patient will never reach the period for secondary amputation. In all cases, where the cavity of the joint is extensively opened into, and by a lacerated wound, the safer mode of proceeding is to amputate on the spot.

On Saturday next, gentlemen, I shall deliver a clinic on that case of erysipelas of the head, and probably on the case of tumour in the ham, simulating popliteal aneurism.

INTRODUCTORY LECTURE,

Delivered

BY DR. GORDON SMITH,

In Foley Place, January 20th, 1832.

GENTLEMEN,

I COME before you not unaware that by some, or in another place, I might be looked upon as one who has performed the part of a *task-master* to the rising generation of the medical profession; but from the present auditory I have not the slightest apprehension as to receiving any such reproaches. We have met in the very focus of metropolitan intelligence, in the centre of several institutions, renowned (and justly so) for the cultivation and encouragement of science and literature. We are surrounded by medical schools and public hospitals, and the name of almost every one who is eminent for attainments, or distinguished for the beneficial exercise of skill and humanity, is to be found upon the doors which surround this house. We are met for a truly noble and most useful purpose. You are not assembled by *compulsion*; and I reckon implicitly upon a fair and candid interpretation of whatever I may deem it my duty upon this occasion to say.

I have commenced by admitting the bare, though almost inconceivable possibility of an accusation being brought against me for a deed in which I shall *glory* till the last hour of my life. I have been chiefly, if not, in point of fact, solely instrumental in adding to the claims upon the labour and attention of medical students. I could not *effect* it; but I pointed out the necessity of enjoining upon such, the study of FORENSIC MEDICINE. Its importance had been previously recognized—but its cultivation continued optional. Thus it might have longer remained, had not strong examples occurred, under my own observation, which rendered it impossible to keep silence longer upon a matter so essential to the very vitality of professional reputation. To the College of Physicians I made no representations, for they profess not to meddle with the course of education; to that of Surgeons, I

considered it equally useless to apply, for reasons which you can be at no loss to conjecture:—but I saw a manifest desire on the part of APOTHECARIES' Court—the only corporate body armed with real professional power—to discharge their highly important duty to the public, as well as the profession, by taking care to enjoin such a course of education, and such a test of fitness, as would, on the one hand, guarantee the citizen from the danger of inefficient medical aid—and, on the other, secure to the practitioner the substantial benefit which *must* result from due qualification. To them only did I address myself; but I had the pleasure of seeing my representation promptly, and even handsomely appreciated. This arose entirely out of the intrinsic importance of the matter—for with any member of the Court of Examiners I had not the slightest personal interest; and may say that I have none, whatever, at the present moment.

Whatever the preliminary merits of the case may be—in whatever quarter there may be supposed cause of umbrage, or to whomsoever thanks may be due—it matters not. Here we are assembled, for the first time, in consequence of the injunction which has been laid by *this Court*, and laid under circumstances requiring a few words by way of explanation.

The study of FORENSIC MEDICINE is now imperative upon all candidates for the licence at Apothecaries' Hall, who shall have commenced their attendance on lectures subsequently to January 1, 1831. And this is a law which comes into full force in October next. Consequently, I must admit, that you need not enter to these lectures until then; but may find it convenient to attend the instruction, and certificates will be at your service. Here let me interrupt the strict order of remarks, by laying down to you the distinction between tickets and certificates. The *ticket* which the pupil takes from the teacher, is merely a token of his right to enter the lecture room, and to be registered as a pupil. The certificate declares what sort of a pupil he has been—good or bad (for I should have no hesitation in certifying that I had not seen a regular absentee for so many weeks, or that such and such a person had made no progress in the study of forensic studies.) To the certificate the court will look, and, I believe, to that only. For the ticket you will have to pay—the other document you must *earn*. For my own part, I disapprove of making such a deed a matter of form, by copperplate work and fine, though absurd, engravings. It is *my* design to draw distinctions, and to write out, deliberately, my opinion of the party who may apply, when the time shall come. The diligent student shall be praised, but the idle fop shall be described. *Talent* is as God pleases, but *industry* is in the power of every healthy and honestly-disposed person. Therefore, *young gentlemen*—you whose parents or guardians

—whose friends, or it may be, whose undirected disposition and uncontrolled funds have been the cause or agency of your entering the lists of our profession; I have done no more than a preliminary duty, in placing the good and the evil before you. It is for you to choose: but few know better than I do, how the consequences of a bad beginning stick to a man, whatever he may be—in whatever rank or station, in whatever profession—stick,—aye, and stick fast to him, FOR LIFE. *Begin well*; and should difficulties occur in your future progress, the habits which you have acquired early, will accompany you like armour, and bear you like a vigorous charger, comparatively scatheless, happen what may.

To return, however, from this ethical digression:—

The injunction to take up forensics, in the second year, is in strict conformity with the opinion that I have all along expressed, that a beginner in medicine could reap but little advantage from turning his attention to this subject; and that I do not wish any pupil to seek such instruction as we here profess to give, until he shall have been fairly grounded in the ordinary branches of medical knowledge. Upon this point I purpose to expand at an early opportunity: in the mean time it will be sufficient to say, by way of illustration, that it is as unlikely to make a MEDICAL JURIST of him who breaks his head against medical jurisprudence, while he ought to be studying anatomy, chemistry, and other branches, as it would be to make a natural philosopher of one who might begin with *mineralogy, geology, optics, or astronomy*—while he ought to, be under sedulous application to *reading, writing, and arithmetic*.

It may not be an uninteresting or unprofitable manner of occupying a portion of the passing hour, if I impart to you the origin of my peculiar connexion with the public business of medicine, as distinct from its private; and I use the term *peculiar*, because I may avow, that in England, I have stood absolutely *alone* in this matter! Other, and more talented persons have made their appearance from time to time; but there has been a lack of *perseverance* among them. To account for this would be no matter of difficulty, but such an undertaking I can hardly, upon this occasion, make. I shall not, however, treat *existing* proposals with the same degree of delicacy. Allow me, therefore, to say, that so long as nothing but expense, envy, hatred, malice, and uncharitableness, were the rewards to be reaped from professing the business of the medical jurist, I was left in full possession. But when the apothecaries opened the eyes of medical men as to the necessity of making our branch of essential service, I had the pleasure of seeing that teachers sprung, in a manner, out of the ground. They rose like magic, and the journals have been long filled with their announcements. I cannot, however, ascertain (with one or two

exceptions) that any of them are *bona fide* at work; perhaps they have now begun to make their preparations, which every man must do who desires to qualify himself for the important duty of imparting instruction; and a teacher ought, unquestionably, to be armed with a considerable share of personal experience in the subject matter professed by him, should it be one of practical application.

My acquaintance with Medical Jurisprudence is not of yesterday's date. In 1805 (if I mistake not, for I have no books to consult) a chair was endowed by the very government under whose auspices we live now, in the University of Edinburgh; and the first professor, was the present Dr. Duncan, who so ably teaches *materia medica* and therapeutics. His lectures were delivered, for the first time, in the summer of 1810, and I was one of his original pupils. It struck me, even at that early period, that the *novelty* of the study was even less worthy of consideration than its *utility* and *importance*. However, that went almost out of my head during a busy period of several years which I passed in the army medical department: this period came at length to a close, and I betook myself again to the metropolis of my native country. Here I met with the French translation of Metzger's System (I think it is called) by Ballard; and, although it is by no means a ponderous volume, it is a cyclopædia, almost in itself, of forensic medicine.

This aroused my dormant propensities; and perceiving that a path, which had ever been a favourite one, was, in point of fact, unoccupied, I gathered together all the other books which I could find upon the subject, and began to think for myself upon the points of arrangement and adaptation to British purposes. A course of lectures was accordingly delivered so far back as the year 1820, which was tolerably well attended. About the same time a note book, which I had somewhat carefully prepared, was lent to an eminent barrister going the circuit, who had two cases of indictment for *child-murder* to defend. Both his clients were acquitted; and he professed that he had derived very great advantage from the perusal of the notes in question. Here was great encouragement; and I next ventured into print. My book was favourably received both at home and abroad, and is now in the hands of the profession. Of this work another and more appropriate occasion will occur for speaking: at present I shall only say that I recommend it as my text book; and that I have hitherto seen little, if any cause, to retract any opinion therein promulgated. Improvements I hope it is in my power to make in future editions;—acquisitions of intelligence I continue almost daily to receive from many quarters; and while it is my own delight to keep pace with the progress of the science, I have an advantage of which every scientific applicant cannot boast—which is, that this science keeps pace

with me. Hardly a public journal comes out which does not contribute new facts, nay, even discoveries, in medico-legal matters; and these I have made a rule of recording, of verifying, or rejecting, if unfounded. Proceeding upon the inductive method, I have gone from particulars to generals, and succeeded at length in laying down doctrines and principles which I understand have facilitated the labour of others.

In the course of these pursuits, I was vexed at perceiving, not only how frequently, but even how *uniformly*, medical witnesses broke down in the courts. I could not help compassionating them; and resolved to submit myself to the same sort of martyrdom, in order that if I did not discover a remedy for their sufferings, I might, at least, have the melancholy satisfaction of suffering *with* them. I, therefore, contrived to get myself into the situation of a witness, for the purpose of being enabled to speak from personal experience. I stand, therefore, before you as a person of practical experience in the matter of forensic medicine. In the course of four months I saved four persons (whom I thoroughly believed to be innocent) from a verdict of guilty on accusations of murder; and whom erroneous, if not unprincipled, medical evidence would have consigned to the scaffold. This is no boasting assertion; and, as the readiest vouchers for the fact, to which it is in my power at present to direct attention, I shall say that in the *Lancet* for April, 1829; in some of the subsequent numbers of the same journal; in a published lecture delivered in the university, and in some of the daily papers of the same period, you will find copious, if not full, accounts of these transactions. One thing occurred of rather an unusual nature; which having proved to be the exciting cause of the addition now made to the sum of medical education, I shall not hesitate to reveal.

I strolled into the Old Bailey court one Friday, Sept. 11, 1829, (soon after the occurrence of the cases just alluded to), while a poor foreigner (a perfect stranger to me, and with whose case I possessed not the slightest acquaintance) was standing his trial on a charge of murder. Two witnesses, professing to be medical men, who had been concerned in the business almost from the beginning, gave such disgusting testimony, that the sheriff and the legal gentlemen implored me to interfere. This I resisted for some time; but, at length, I heard such ignorant assertions that I could not persevere in my resistance. The result of my presenting myself as a witness on behalf of the prisoner, was his prompt acquittal; and not only a prompt, but unquestionably a just one. The ulterior consequences were, a representation on my part to the Apothecaries' Company, upon the necessity of doing something *compulsory* for the redemption of the professional character, nineteen out of twenty practitioners being licensed by them, and

the injunction (which this year comes into force) that all candidates for that license *must* study FORENSIC MEDICINE, has been the result of my representations.

These few observations may, perhaps, satisfy the younger part of those present, who are pressing forward to the high calling which will constitute them medical practitioners; but I must pay my respects to two or three other classes, *representatives*, that I believe to be present; also I must say something to medical men already engaged in, or qualified for, the discharge of their ordinary duties.—I must endeavour to gain the goodwill of *medical practitioners*.

You, then, gentlemen, are those upon whom the duty ought to devolve; and upon whom it very frequently does devolve, of enlightening the tribunals concerning medical doctrines, facts, and opinions. In the discharge of this duty, I know well to what you are subjected in the way of losses, crosses, disappointments, and impediments to personal interests. The tax upon you is not only grievous, but absolutely unjust. I wonder not that you seize almost every opportunity of furnishing substitutes; though it cannot be for the welfare and prosperity of the profession that such a practice should continue.

Why medical men should have to contribute so heavily to the support of public justice, is a question that will not bear discussion: for there is neither reason nor justice in the practice, and nothing to be pleaded in its favour beyond established custom, and want of legal protection. To the *custom* I apprehend that you yourselves are main contributors; because you do not stand up so stoutly as you might do for your own interests, rights, and remuneration. You all complain of attendance on Coroners' Inquests, and you have but too much reason to do so; but so long as the country is beleaguered with such Coroners as we have to deal with, who, in nine cases out of ten, can perform no more of their *essential* duty than could be done by any attorney's clerk (however ill educated) the thing will continue as it is, unless our profession rises to a man, in their own defence. We want union and co-operation more than any class of society: we are, in fact, a rope of sand—composed of particles that have little attraction either of cohesion or aggregation. Forensic medicine, if I am not mightily mistaken, offers a cement; do not reject it; for I promise you, and I pledge myself, that in a few days you shall see that it is in our power to remedy these evils. We therefore, invite the actual members of the profession, to attend not so much the doctrines and instructions we undertake to deliver, as the suggestions for their own advantage—even in a *pecuniary* point of view—which we purpose to advance. Come unhesitatingly, as often as you can make it convenient; you will here find, fearless and zealous friends.

There may also be present some gentlemen of the legal profession; and to such, out of courtesy, a few words are unquestionably due. The fewer I make use of, provided they be to the purpose, the better. It is my wish, gentlemen, to bring the professions of law and physic into more intimate acquaintance; and to accomplish this object has been the labour of a not inactive life. Why should we, for instance, be afraid of you? For my own part, I have met with nothing at your hands but polite and even kind treatment, except, perhaps, from one or two quarters, which I know you look upon as contemptible. I know that you are, generally speaking, desirous of being *instructed by us*, when medical matters are submitted to your management, and to me it has ever been a *pleasure* to take my place in the witness-box. Yet there are many things to which you would do wisely, in my opinion, if you were to devote some attention in the course of your preliminary studies. Thus, when we might have occasion to consult and work together, much time would be saved, for we should readily understand each other. Our interests can never clash; and jealousy or rivalry between us is quite out of question. We wish to conciliate and approach you, do not *repel* us, because *your* profession is a path to political honours and distinctions; while *ours alone* holds out no reward of any collateral description.

Are there present, any who are accustomed to sit upon juries? If so, let me tell *them*, that they have often been led into the most awful mistakes, from not knowing the nature and value of professional testimony. Recollect, and all present, *must* recollect, the cases of Elizabeth Fenning and James Butler. These are beacons, which can never be hurled from the sight of society. The one was hanged upon the downright mistake of a medical witness; and the other was also conducted to an ignominious death because due pains had not been taken to bring forward chemical intelligence in his favour. There are now and then occasions, upon which circumstantial or presumptive evidence, must be received with suspicion. Depend upon it, there is no intelligent English house keeper, who may not acquire some useful knowledge here.

It is necessary, that I should add a few words, concerning the manner of proceeding which it is intended to adopt. That a *Professor of the adjacent University*, one of the *original Professors* should lecture in a private house, may appear to require explanation. Satisfactory explanation I certainly could give, but it will be better, in my opinion, to let the circumstance explain itself; which it will ere long do. In the mean time, I desire to observe, that I calculate upon the most effective aid being afforded by the gentleman, who has associated himself with me in the undertaking. He may not be much

known to the public, for his opportunities of making a public appearance have been few: but I have long and *intimately* known him, perhaps, to a certain extent, I may say, that I have directed his attention to the peculiar pursuits. I have the utmost confidence in him; and should the unexpected event occur of an interruption to my proceedings, on the part of health, a sacrifice which, among others, I have had to make in the public cause—he is so conversant with my ideas, and so well acquainted with my manuscripts and other materials, that I shall be consoled by finding my place so ably occupied. Rely upon it, however, that I shall not delegate any thing which I may *undertake* to perform, except from the direst necessity; and the undertaking, as regards both Mr. A. and myself, is the following.

It is proposed to deliver the lectures three times a week, on Monday, Wednesday, and Friday. The Monday and the Friday lectures will be reserved for the general details of the subject, as laid down in the prospectus which has been placed in your hands; and these I purpose, with the help of Providence, to deliver *personally*. After a few introductory and general instructions, my colleague will enter upon the subject of TOXICOLOGY, or *death by poisoning*. These lectures and demonstrations we design shall be given upon the Wednesdays, *pari passu* with the general course, by which time will be saved, impatience for details in some measure arrested, and progress effectively made. With this introduction of my friend, I shall take leave of a subject which is to me painful only, because I can hardly allude to Mr. Anderson without speaking of myself.

It is rather a hazardous affair for a person of another occupation to speak upon matters of law, though much of what is so stiled, is in point of fact nothing more than the display of intellectual acumen. There is no lack of talent or of information—perhaps, even of knowledge of the world among medical men; but my respected brethren have hung back from an ill-founded dread of publicity. Lawyers, on the other hand, are accustomed to sharpen *their* wits, and, not unfrequently, polish them against those of one another—or if they can find a grind-stone in the shape of a witness, they are not loath to press hard, and rub fast; but there is a circumstance to which I have, upon former occasions, alluded; to which I may allude hereafter—and to which I shall advert now. Witnesses of all descriptions go into courts, not knowing the real nature of their situation. It is enough for the present, to exemplify by the case of ourselves, for the subject of medical evidence will receive, in due time and place, a copious share of attention. We are never harrassed by captious questions; and it is very common to hear all the witnesses ordered out of court (before the examination begins) *except the medical*. The real and advantageous use of

this FACT, which I beg that intended pupils will not forget, shall be noticed upon a future occasion. I shall merely say now, that the practice is a sufficient refutation of a doctrine which has been laid down by certain writers on forensic medicine—namely, that medical men intending to give evidence, ought not to confer together upon matters of professional knowledge and opinion. It is some years since this heresy was broached; and I fear it has been the cause of much embarrassment to many practical medical jurists. The authorities allow us to hear all the evidence, with the very intent that we shall form a valid opinion, and, if possible, a unanimous one.

St. Bartholomew's Hospital,

SURGICAL LECTURES,

Delivered

By WILLIAM LAWRENCE, ESQ. F.R.S.

February 6th, 1832.

ANEURISM.

GENTLEMEN,

I HAVE already spoken of some of the varieties of aneurism; this evening I shall confine myself to those modifications of it, which I have not noticed before.

There have been different divisions of aneurisms; the ancients divided them into internal and external, the former being those situated within cavities, as the thorax, abdomen, and pelvis, and affecting the large vessels, as the aorta and iliacs, whilst the external ones, are those situated in the extremities. Latterly, there has been a different division of them, into true and false; true aneurism is said to exist, when there is dilatation of the coats of an artery; false, when there has been a rupture, or ulceration, or giving way, of the coats of an artery, and a cyst has been formed of the surrounding parts. This division is of no importance in the treatment of the disease, it is merely useful in a pathological or historical point of view; it will make no difference in the treatment, whether it is a true or false aneurism, whether it is one of dilatation or rupture. The old opinion was, that aneurism was invariably produced by dilatation of the coats of the artery; this is a very uncommon occurrence, it is most frequently caused by ulceration or rupture of the coats of the vessel. Scarpa has been at considerable pains to prove, that all aneurisms belong to the class denominated false aneurisms; he says the disease is always produced by a thinning and giving way of the parietes of the artery. This is not the most common opinion of their origin;

there is, in the first instance, a partial giving way of the coats of the vessel, and it becomes distended, as it progresses; ulceration or absorption coming on, converts what was originally a true aneurism into a false one: those we operate on are generally false aneurisms. We see, therefore, Scarpa's views are not exactly correct; in the first instance, it is a true aneurism, then it becomes false. There is another description, termed the mixed aneurism, in which there is dilatation of the vessel, and at a certain point rupture has taken place, and there is a cavity or cyst formed external to the artery. You here observe a specimen of the mixed kind—it is an aneurism of the arch of the aorta, part is contained within, part without the chest; in one part there is dilatation of the artery, and here in front there has been rupture of a very small portion of the tube; there has been absorption of the ribs by its pressure, and the cyst is formed of the surrounding parts. True aneurism seldom occurs; when it does, it is generally situated in the aorta, more especially at its arch; it now and then happens in the arteria innominata. In the majority of cases the part giving way is of a very small extent; in the preparation before you it is not more than an inch, although the disease is very considerable—this is its ordinary appearance. A false aneurism is rather a tumour formed on the outside of an artery than existing in the artery itself; here is a preparation illustrating this point—there is a large tumour formed by condensation of the surrounding parts external to the vessel, and the communication between it and the tumour is to a very small extent. A true aneurism could not take place to so large a size, the walls of the vessel would not yield to so great a degree. You will understand the difference between the three kinds of aneurism; that in the true aneurism, there is dilatation of the coats of the artery, and that this disease occurs most frequently at the arch of the aorta; that in the case of false aneurism, there is a sac formed by the neighbouring parts external to the artery, but maintaining a communication with it, and lastly there is the mixed kind.

Aneurisms occurring in Scarpa's way may happen in advanced life; at that period an alteration frequently takes place in the coats of some of the arteries—they become thickened, and of a yellowish appearance, a deposition of an atheromatous, steatomatous kind takes place; they very easily crack, and spaces are in this way formed, allowing the exudation of blood from the artery. The opportunities of examining these diseases during their early stages are not very frequent; they do not terminate fatally until they have attained a considerable size, and it is only by accident, or by persons affected with them dying of some other complaint, that we have the means of examining their condition in the early periods of their growth. The internal and

middle coats of the artery become absorbed or ulcerated; the external, which is cellular in its texture, and very lax and distensible, yields to the pressure of the current of blood flowing in the vessel, and forms a projecting tumour, or a false aneurism as it is termed. False aneurisms are either circumscribed or diffused; the original small circumscribed tumour gives way by ulceration, and the blood is effused into the surrounding parts among muscles, tendons, vessels, and nerves; the tumour increases to an indefinite size, according to the nature of the part, and pulsation ceases, thus forming diffused false aneurism. If the brachial artery is wounded in the operation of bleeding, and if pressure is made to stop the hæmorrhage, a small swelling takes place over the injured part, which increases slowly, a sac is formed by condensation of the surrounding parts, and a circumscribed false aneurism is the result. Wounds of arteries, if the external opening is small, cause a general swelling and tumefaction of the limb in which they occur; these have been described as diffused false aneurisms, but in truth they are no aneurisms at all. An aneurism is at first circumscribed; rupture takes place afterwards; the symptoms, after having burst, are—the patient himself describes his having had a feeling as though something had given way or burst in the part; there is swelling and tumefaction of the extremity, and pulsation ceases; these then are the symptoms of diffusion. The sac in circumscribed false aneurism is formed partly by distension of the external or cellular coat, and partly by condensation of the parts and organs immediately connected with it. When the ascending or thoracic aorta is the seat of the disease, the trachea, pulmonary artery, and other important parts in the neighbourhood of the heart contribute to the formation of the sac; when lower down, the vertebral column and the viscera of the abdomen are engaged, and thus we see that any parts may be involved in the sac, so as to increase it to an indefinite size; there is a preparation in which the disease existed in the thoracic aorta, the ribs have been absorbed, and the parts externally contribute to form the sac.

At first the tumour consists only of the sac, which contains fluid blood; it is soft and yielding, and if pressure is made on it in this stage, the swelling disappears, but returns when the pressure is removed: by degrees the blood being moved out of the influence of the circulation, coagulates first at that part of the tumour most distant from the artery, at that part where it is least under the power of the circulation; or rather, the blood deposits there its fibrine, the other constituents of the blood being removed. The fibrine is deposited in successive layers; these have a white, yellow, or brown appearance, are tough and fibrous, adhering firmly to the surface of the sac, and to each other, and occupying more or less of the abscess. Here you have a fine example of

this laminated deposition occurring in an aneurism of the arch of the aorta; you see how it is deposited, stratum upon stratum. Besides these layers, in examinations made after death, the centre is frequently found occupied by a recent coagulum of blood; now if it were to become filled in this manner during life, it would undergo a spontaneous cure. In recent cases, after death, the cavity of the tumour is generally found filled with a larger or smaller quantity of blood.

The *causes* of aneurisms are very obscure, wounds often give rise to them, as often happens in the brachial artery; strains are another frequent cause; likewise great effort or exertion of the limb—hence the frequent occurrence of popliteal aneurism from long continued exercise and powerful exertion of the leg; by these means the coats of the artery become weakened, and give way, producing the disease: but in very many cases we are not enabled to trace them back to any local cause, they seem to arise spontaneously, or from a constitutional or internal cause; as I before observed, they occur more frequently at or after the middle period of life, in persons whose arteries have taken on a diseased action. They happen more frequently in men than women; this may in some measure be accounted for by the difference in their habits and occupations. According to an estimate made by Mr. Hodgson, I think out of sixty-three cases, fifty-six were male, and seven female, shewing a very great disproportion.

The most important *symptoms* of aneurism are a swelling occurring immediately over, and connected with an arterial trunk; it is of an indolent character, very slow in its progress, without heat, inflammation, or redness. It has a remarkable pulsation, beating very strongly; its pulsations synchronous, with those of the left ventricle. In the early stage it is soft, and yields to pressure, before any laminae of coagula or fibrine are deposited; after there is a large deposition, it becomes hard and firm. Any other tumour occurring in the tract of a large artery might be mistaken for an aneurism; in order to satisfy yourselves on this point, grasp the tumour firmly in both hands; if it is an aneurism it will pulsate equally on all sides. The tumour itself is never painful, but, from its situation, it may produce pain, by pressure on the nerves; and as these generally accompany the arteries in their course, there is frequently considerable pain or numbness. Sometimes the nerves are exceedingly numerous, as, for example, the axillary artery is, in a measure, surrounded by the axillary plexus of nerves; when aneurism occurs in such situations, there is great pain, both at the origin and during the progress of the disease. I have known patients complain of very considerable pain in parts supplied by nerves, which are seated in the neighbourhood of an aneurism; these pains have often been mistaken, and treated for rheumatism, until the progress of the

complaint has shewn the true nature of the case. I recollect having seen a good example of the effects produced by the pressure of an aneurism upon the nerves, in the examination of a patient who had died with an aneurism in the axilla; they were pushed forward from their situation, flattened, and drawn out like a piece of tape. As the veins and absorbents accompany the arteries in the same manner as the nerves, the functions of these vessels will likewise be impeded by the pressure of the tumour; the return of blood to the heart will be obstructed, producing general œdema of the extremity; this we see exemplified when an aneurism occurs in the ham—motion is from the same cause impeded. Pulsation is a symptom not always to be relied upon; sometimes aneurisms do not pulsate, and, on the other hand, other tumours have pulsation communicated to them from a neighbouring artery. As the disease increases, the deposition of laminated fibrine goes on, and by its accumulation pulsation is precluded; but when I have not been able to discover pulsation by the hand, in several cases, I have distinguished it by applying the ear; a noise resembling the blowing of a pair of bellows is communicated, it is named by the French, who have been at considerable pains in these matters, the “bruit de soufflet”—it is a sort of puff. Therefore, in the case of a tumour presenting itself, where aneurism is liable to occur, if you cannot distinguish pulsation by the hand, apply the ear; some persons recommend the stethoscope; this cannot answer the purpose better than the ear, indeed, in my opinion, it is not so true. There was, some time ago, a patient in the hospital with a tumour, which was supposed to be aneurism of the external iliac. No pulsation whatever could be distinguished by the touch; I then endeavoured to ascertain whether I could discover it by the ear. At first the sensation was very obscure, but, still entertaining the same opinion of the complaint, I made an examination, by the latter mode, a short time afterwards, and it was then very obvious. It now and then happens that an aneurismal tumour will pulsate at one time, and not at another; the reason of this is, that the communication between the artery and the tumour becomes obstructed by a coagulum; this, from a sudden impetus of the circulation, is removed, and then pulsation returns. There was a patient in the hospital with a tumour beneath the crural arch. It was evident, from his own statement, that in the first instance there had been pulsation, but it had then ceased; this case underwent a spontaneous cure. A gentleman from the country applied to me with a tumour in the iliac region; from the age of the person, the situation of the tumour, the œdematous state of the limb and the previous history of the case, I was perfectly convinced as to the nature of the disease, although pulsation at that time was not discoverable by means. I

performed the operation, and the patient was cured; thus you see you may meet with aneurism in which there is no pulsation.

Tumours not aneurismal may pulsate, so that it requires some discrimination properly to appreciate the disease; in order to avoid a mistake of the case, you must investigate minutely the previous history of the complaint; endeavour to raise the tumour from the artery; the pulsation is either altogether gone or weakened, it has a different kind of feel, and if you grasp the tumour in both your hands it has a solid firm feel, whilst an aneurism is soft, and transmits a pulsation in all directions; by a careful examination there are very few cases on which you will not be enabled to decide with certainty. An aneurism at its commencement is not very large, it does not make any material progress in a short time, it goes on gradually increasing, and advances towards the surface of the body, causing absorption of the intervening parts; when it has arrived at the surface it frequently bursts, and if it is from a large artery the hæmorrhage is generally fatal; this case is in some measure different with internal aneurisms, they burst before they get to the surface, they do not attain beyond a certain size, which commonly varies from that of a nut to walnut: when the descending aorta is the seat of the complaint, it bursts into the cavity of the chest beneath the pleura; those of the ascending aorta, or its arch, into the trachea, œsophagus, or pulmonary artery. When an aneurism in the limbs gives way, it changes its character, and from circumscribed it becomes diffused, as when aneurism of the femoral artery bursts, the blood is effused into the surrounding parts on the internal surface of the thigh, and there is great tumefaction and distention of it. In some cases the progress of the complaint leads to a spontaneous cure, by the deposition of the laminated coagula, so as to fill up the cavity, and form a hard tumour, which pressing upon the upper end of the artery, causes its complete obliteration; sometimes inflammation of the whole sac has taken place, which has been known to lead to its complete obliteration, and to cure the complaint; but these instances of spontaneous cure are very rare; we are not justified, therefore, in trusting our patients to such an uncertain chance of recovery; we must always have recourse to the operation where it is practicable. In internal aneurisms surgical aid is altogether out of the question; all that we can do in these cases, is to direct our observations to whatever will moderate the disease; this to be done by paying attention to the state of the circulation, to posture, to maintain the patient in a state of weakness; to accomplish this we must keep him in a state of rest, in the horizontal posture, have recourse to bleeding, low diet, put him on the starving system, and administer opening medicines. I have met with a case of aneurism of the aorta in which these means were used with very considerable benefit, the tumour was very much diminished in size,

and the difficulty of breathing removed, shewing that it was much relieved; but my experience does not enable me to say that they are capable of cure by this method. Probably I have not carried the starvation far enough, the persons generally admitted into our hospital are of the lowest order, they do not like to be deprived of their sources of pleasure, which for the most part consist in eating and drinking; they do not much relish being bled, purged, and starved; after they have been put on this system a short time, they complain of being weak, and want to get at the mutton chops, porter, and good living, and would like to try other means. Some persons may possess other means of recommending their patients to practise the starving plan with a good grace; for, in a work well known on this subject, Mr. Hodgson's, we find several cases recorded to have been completely cured. In external aneurisms we have no proof of this plan having been adopted, since we have a certain mode of cure by operation. Pressure is a mode that has been tried, its effects are very different in general; on account of large arteries being accompanied by a corresponding nerve, it is very painful, and not at all available. The only certain mode of cure consists in performing the operation before mentioned, of placing a ligature on the artery between the heart and tumour; it may be taken up in any situation where it is most accessible; for popliteal aneurism we tie the femoral in the upper part of its extent, and the operation is quite as successful as though we applied the ligature just above the tumour. After the operation has been performed, pulsation continues in the tumour at first, the sac afterwards becoming filled with coagulum, is obliterated by absorption. It is said, that tying the aorta cuts off the circulation of blood in the tumour; this statement is not correct, the flow of blood is not cut off, but its force and quantity are diminished by its winding through the collateral branches. In a patient who had undergone the operation for popliteal aneurism, the pulsation returned after he had been dismissed some time: our object is to diminish the quantity and force of the blood, and to produce contraction of the tumour by counteracting the power of the artery supplying it. The sac diminishes, and the vessel contracts and becomes as firm as a cord in two situations, above the ligature as high up as the most collateral branch, and beneath the tumour as far down as the next large branch. The powers of the collateral circulation prove that the operation may be performed upon any vessel that is accessible, the arteria innominata, the common iliacs, and the common carotids have been tied, and the circulation was adequately performed; there is no question, therefore, about the propriety of the operation when it can be performed; ordinary injection of the vessels proves the same thing.

There has been a proposal made by Mr. Wardrop, to tie the vessel beyond the tumour,

when the aneurism is situated near the trunk of the body; this may be done where you can place the ligature between the tumour and the next collateral branch, but the body of experience goes against the general adoption of this operation; the only vessel on which it can be performed with success is the carotid, in its first situation, at the lower part of the neck, where there are no collateral branches given off; the anastomosing branches of the upper extremity keep up the circulation; but this theory is most applicable to the subclavian, axillary, iliac, or femoral; the only guide for us is experience, and experience is against the operation; it will not do to admit reasoning *à priori*, as it is called, in matters of this kind. At present I shall defer describing the operation to you until I come to operations on the arteries.

Medical Society of London,

Monday, January, 30, 1832,

DR. BURNE, President, in the chair.

Exfoliation of the Internal Ear.

MR. LINNAGAIR stated the following case:—In the month of April, 1830, I was first called to see the patient, an infant, eight months old, whom I found labouring under symptoms of phrenitis, accompanied with considerable excitement of the vascular system; this affection was treated in the usual manner by depletion, purgatives, and evaporating lotions, and the child shortly recovered its health. In about a month or six weeks after this attack, a purulent discharge was observed to flow from the left ear, the child at the time being in apparent good health; no notice was taken of this circumstance, nor was I informed of it, until after the expiration of three or four weeks, when the mother observing the side of the face, and neighbouring parts looking red, sent for me: I found the discharge to be copious, and of a healthy purulent character, but possessing acrid properties, from which the parts wherever it touched, became excoriated; there was no apparent pain, heat, or swelling about the ear, but rather an

unusual appearance of the left side of the face; which seemed larger than the other: the eye also seemed larger than its fellow, the ciliary margins of the eyelids were inflamed, and there appeared increased vascularity of the conjunctiva; I was informed when the child slept, this eye was not closed. The patient was in good health, ate, drank, and slept well, and was beginning to walk. Leeches and blisters were applied from time to time behind the ears, and a slightly stimulating lotion was injected into the auditory passage, and the parts were directed to be kept clean. Notwithstanding the use of these means, the symptoms continued much the same, with the exception of the discharge, which increased, but lost its acrid properties, or rather the excoriation, which existed at the time I first saw the child, was no longer observable, in consequence, I suppose, of the discharge being removed more frequently. The left side of the face at length became perfectly paralysed; when the child either laughed or cried, the muscles of the right side of the face were preternaturally drawn up, whereas those of the left side were unmoved; the left eye also continued apparently larger than the right, and was incapable of being closed; during this time, the small bones of the ear were discharged through the external meatus. In consequence of the family going into the country, I lost sight of the child for two or three months, and when called upon again to see it, which was in October last, I found the patient suffering from irritative fever, and disordered digestive organs; I learnt from the mother, that the child had had very good health up to this time, and that the discharge still continued from the ear, accompanied with a most offensive odour: upon examination, I found the meatus filled with fungous flesh, and the cartilage of the ear was pushed out from the side of the head; the child cried when the finger was applied to the posterior part of the organ; there

was, however, no other sign of inflammation perceptible; no redness or increased heat of the part. By the application of the cupri sulphas to the roots of the fungi, which grew from the sides of the external meatus, they fell off in the course of two or three days, and exposed the cavity of the ear, at the bottom of which I perceived a whitish substance, which I found to be bone. A weak solution of the lunar caustic was daily applied, and poultices at night. The fungus continued to grow rapidly, and upon each removal of it, I found the bone gradually advancing. I several times attempted its removal with the forceps, but was unable to extract it, although it was loose; even when a part of the bone protruded beyond the margin of the auricle, removal by the forceps, was found to be impracticable, without using more force than was deemed prudent. At length, on the night of Tuesday last, a strong solution of blue-stone having been applied to the fungus on the morning of the preceding day, the whole of the contents of the meatus were spontaneously thrown off, which I found to be the labyrinth consisting of the semicircular canals, vestibule, and cochlea. Upon looking into the ear, I could see a considerable distance down the meatus, which appeared lined at the bottom and lower parts of the sides, with a thick yellowish substance resembling pus. The cartilaginous part of the passage appeared much enlarged, and had a ragged appearance, from the roots of the fungus, which had grown from its sides.

The irritative fever, which had existed in October, was very soon subdued, and the child regained its usual health and spirits. Up to this time, since the bone came away, there has been scarcely any discharge; the external ear has gradually returned to its natural appearance, and no one would suppose so serious a disease had so recently existed, were it not for the paralysis of the left half of the face, which still exists.

Some discussion took place on this case, which want of space obliges us to exclude; but we cannot help adverting to the absolute folly of a medical disciple of Irvine (*proh pudor!*) who attempted to obtrude his fanaticism and humbug on the members of the society, after the adjournment of their debate. Think of the absurdity of a medical man commencing a prayer in the most solemn manner, with uplifted eyes and hands, for the conversion of the faculty! We cannot trust ourselves to comment further upon this most unusual, extravagant, and ridiculous proceeding.

Monday, February 6th, 1832,

DR. BURNE, President, in the chair.

Partial Paralysis—Use of Iodine, and Hydr iodate of Potass.

DR. GORDON SMITH requested permission to say a few words; when the President replied, that it was always customary to read the minutes of the last meeting, before any remarks were made. The minutes were read, and Mr. Henry Bond was elected a Fellow.

Dr. G. Smith again rose, and commented with great severity, on a report in a Weekly Medical Journal, which he would not name, but which he exhibited to the society; the president interposed, and decided that Dr. S. was out of order, as he was alluding to a private transaction which could not come before the society.

Dr. Burne rose and said, that though he would much rather listen than speak, he was induced to make a few remarks on a case which lately presented itself to his notice, as the time of the meeting was rapidly passing away, and as no other member seemed disposed to rise. He had lately seen a female advanced in life, who complained of want of sensation and motion in the little and ring fingers, with an unpleasant sensation along the course of the ulnar nerve. On examining the nerve behind the condyle, no morbid change was discoverable. The woman stated, that she went to sleep while labouring under a severe head-ache, with her elbow resting on a table, and her cheek placed on the hand; and when she awoke she found her fingers affected. He, Dr. B. had seen other cases of the same kind, induced in the same way, and these he found generally incurable. He

begged to ask the members present, many of whom, from their great experience, were well qualified to inform him, the results of their experience in such cases. He recollected the case of a gentleman, who went to sleep with his fore-arms leaning on the back of a chair, and awoke with paralysis of both, which remained incurable. A person from lying with the arm under the body, was affected with the disease. A sailor, whose arm was fractured, was placed in a hammock, and having allowed the weight of the body to press on the arm, was seized with paralysis in consequence.

Dr. Blicke observed, that he did not think the pressure caused the paralysis; the occurrence of the disease was a mere coincidence.

Dr. Ryan stated, that he had seen three cases, similar to the first one described by the President, but for which the patients were unable to account. The subject of one, was a washerwoman about forty years of age, who was greatly incommoded, by her inability to move the little and ring fingers, which felt cold, and were flexed on the palm of the hand; she complained of pain in the course of the ulnar nerve and along the arm, which was greatly increased by examination of the nerve near the condyle; she had been several weeks affected in this way and was unable to follow her ordinary occupation. By attention to the digestive functions, and by effecting pustulation with the antimonial ointment on the side of the neck, over the origins of the brachial nerves, and omitting and resuming this remedy, for a period of three weeks, she was completely cured. The other two cases, were relieved by the same remedies. Another case of paralysis of the arm, which was preceded by very anomalous symptoms, deserved to be mentioned on many accounts. A female, aged 18 years, of a leuco-phlegmatic habit, whose general and periodical health were excellent, and in whom no symptom of hysteria had ever appeared, was seized with intense pain in the temple; she was ordered an aperient, and to lose blood from the temporal artery. The arteriotomy afforded her immediate relief; but on the third day, she re-applied, in consequence of pain in the other temple and requested most urgently that arteriotomy should be performed on that side. The operation was accordingly performed, and afforded speedy relief; she returned in a few days, and said the pain was now as severe as ever in the back of the head. She was cupped with benefit. In a few days Dr. R. was requested to visit her, as she was unable to evacuate the bladder. It became necessary to employ catheterism twice a day for three months, though various remedies were used for this new disease; she was suddenly seized with anasarca, when the bladder resumed its office, and the usual remedies soon removed her disease; she completely recovered, and remained in

good health for many months, when she was seized with paralysis of the right arm and forearm; she was strongly advised by one of the aldermen to become an internal patient in St. Bartholomew's Hospital, where galvanism and electricity were freely employed for several weeks, without success. By the use of the antimonial ointment on the side of the neck, and proper attention to the bowels, she was restored to health in a fortnight; she is now a mother, and has no return of her complaints.

Mr. O. G. Williams remarked that when he was a youth, he was affected in the manner mentioned by Dr. Burne, having fell asleep with his head resting on his hand; when he awoke he found he could not use the limb, and his mother observed that his mouth was turned to one side. These symptoms continued for a few hours, and disappeared by friction applied to the face and the affected limb.

A pause having ensued,—

The last speaker rose and said, that having seen a *New Medical Journal* (the Medical and Surgical), in which there was an excellent account of Iodine, he wished to inform the society, that he had used the remedy both internally and externally, in the case of a lady aged 18, who had not had the catamenia, the glands of whose neck were enlarged, and produced great deformity. The diminution was rapid and astonishing, and afforded corroboration of the facts stated in the journal to which he alluded.

Dr. Ryan requested to know what was the strength of the formulæ employed.

Mr. Williams was unable to answer exactly, as he had procured the medicines from his druggist; and employed the tincture of iodine in a bitter infusion, and the ointment of the hydriodate of potass externally.

Dr. Ryan said, that he was extremely happy to have an opportunity of expressing his opinion on the efficacy of iodine and the hydriodate of potass. He had this day been favoured with the history of two cases, in which the hydriodate of potass had produced the most astonishing effects. It was said by a physician of considerable popularity, that this remedy was useless, except as a diuretic; but the testimony of physicians and surgeons of as high repute, was of a very different character. The subject of one of the cases was a woman, æt. 46, the mother of seven children. She was the patient of Mr. Mathews, of Hunter-street, Brunswick-square. She was of low stature, bilious temperament, and her countenance exhibited a faint leaden colour hue. She complained of transient pains of the loins and inferior extremities, puriform leucorrhœa, "bearing down" lacerating pain in the uterus, excoriation of the labia, and excessive pain during coition. On making a vaginal examination, the os and cervix uteri were found indurated and sulcated. The general health was attended to, the so-

lution of the hydriodate of potass of the *Dublin Pharmacopæia* of 1826 was given, and a weak aluminous lotion injected into the vagina. This plan was pursued for ten months, when the health rapidly improved; and this female is in the sixth month of pregnancy at present. Mr. Mathews can attest the particulars of this case.

The second case was that of a female, whose age was over forty, the mother of several children, who was also under the care of Mr. Mathews, who had a chronic enlargement of the mamma, with stony hardness, lancinating pain, and corrugation of the skin. The symptoms were completely removed by the internal and external use of the hydriodate of potass.

Mr. Callaway observed that he heard the observations of Dr. Ryan with great pleasure, as he had used the hydriodate of potass in a great variety of cases in Guy's Hospital, and in private practice, with general success. He had used it in glandular swellings of the neck, bronchocele, chronic enlargements of the mammae, testis and prostate gland. He related several cases in which the medicine produced the best effects. The gentleman who had the kindness to write for him, at Guy's Hospital, always began to indite ung. pot. hydriod. as soon as a female, with bronchocele, presented herself. He could not agree with Dr. Ryan, that the medicine was efficacious in malignant diseases; and repeated experience convinced him that these diseases defied the knife, and invariably returned after operation. This was of such frequent occurrence, that many eminent surgeons considered operations useless. He had known a lady, the wife of a member of this society, who was married at 18, was the mother of three children, and died at 25 of scirrhus uteri. He was also of opinion that the exhibition of the medicine required great caution. He, with others, attended as fine a young woman as could be seen, for diseased glands in the neck; the hydriodate of potass was given in infusion of camomile, and removed the disease. The patient was recommended to the country, and went to Wales; but in a short time he received a letter from the attending surgeon, stating that general emaciation and great diminution of the mammae appeared, and that the latter organs, which were extremely well developed, resembled those of a woman advanced in life, and who had had a large family. He had used it in the form of suppository, in the case of a gentleman advanced in life, who laboured under enlargement of the prostate gland, and with the effect of obviating the necessity of his getting out of bed eight or ten times a night to evacuate the bladder. Upon the whole, he considered the remedy of great value, but, in his opinion, its effects should be carefully watched. He had used it in the ordinary doses.

Dr. Ryan apologised for rising so soon to address the society, but felt called on by some of the remarks of Mr. Callaway. He agreed

with that gentleman as to the utter incurability of malignant or cancerous diseases, either by medicine or by the knife; but he was convinced if any medicine was likely to succeed, it was iodine, or its preparations. He begged to remind Mr. Callaway that M. Lugol had used these in some hundreds of cases, and found, in general, no bad effects were produced; on the contrary, the health of the patients improved under the use of the medicine. This fact was attested by M. Magendie, and other distinguished individuals, who were commissioned by the Royal Academy of Medicine to examine the statements of M. L. and the cases under his care. According to the latter, iodine was decomposed unless given in aqueous solution, and therefore, Dr. R. considered its combination with bitter infusions was objectionable. He had lately seen a gentleman of a scrofulous habit, to which was superadded a syphilitic taint, with chronic rheumatism, and considerable thickening of the tendinous sheaths of the instep and back of the hand. He had little sleep for several weeks, and was unable to pursue his usual occupations. He was ordered the compound calomel pill, sarsaparilla, and the ointment of iodine, combined with acetate of morphia, which afforded him great relief, and the tumefaction of the instep rapidly reduced, but the amendment of the hand was more gradual.

Mr. Callaway admitted the powers of iodine over chronic indurations, but he considered it dangerous when acute inflammation was present. He was sure Dr. R. would acknowledge that many formulae, considered unchemical, were exceedingly efficacious; and, in general, though he endeavoured to avoid ordering such, he sometimes found it indispensably necessary to prescribe them.

Mr. Shearly related cases of bronchocele which were cured by burnt sponge, given in the form of lozenge, and allowed to melt in the mouth. He thought that many of the old remedies were as valuable as the new, and that the profession were too fond of the latter.

Dr. Shearman inquired whether Mr. S. was not aware that the burnt sponge contained iodine. He referred to the calcined seawrack, the *aethiops vegetabilis* of ancient writers, which was celebrated for the cure of scrofulous complaints. Soda produced good effects from its containing iodine.

Mr. Headland inquired whether Dr. Ryan or any other gentleman present had employed iodine in cases of chronic enlargements of the tonsils in children. There were many surgeons present who could give much valuable information on that point.

Dr. Ryan replied that he had not used the remedy in such cases, but intended to employ it in cases of enlarged mesenteric glands and other scrofulous diseases of children. The reason he had not tried in such cases before was, that it could not be procured in an unadulterated state from one house in ten; should it succeed in these cases,

which were daily observed by men in practice, it would be one of the greatest advantages we can desire.

The meeting then adjourned.

Monday, February 13th, 1832.

EFFICACY OF HYDRIODATE OF POTASS—
APPEARANCE OF CHOLERA IN THE
METROPOLIS.

A VERY numerous meeting took place in consequence of the appearance of cholera in London, being the principal subject for consideration. The minutes of the last meeting were read. Mr. Gosset requested to be informed by Dr. Ryan on a fact stated in the minutes, whether he had said cancer uteri was curable, and why he considered cancer incurable? Dr. Ryan replied, that he certainly had seen a well marked case of scirrhus uteri, which was relieved by the hydriodate of potass, and he fully concurred in opinion with Mr. Callaway at the last meeting, when that gentleman maintained that cancer returned after the use of the knife. He, Dr. R. contended, that if there was any remedy, it was iodine. Mr. Salmon was a good deal surprised to observe so much novelty attached by the profession of late to the use of iodine. He had been using it for years at an institution to which he was attached, and with the best success, in a thousand cases at least. He was very much astonished at the recommendation of Dr. Elliotson, of giving two drachms of the hydriodate twice or three times a day. He entertained a high opinion of that gentleman, but he really could not comprehend upon what principle he, Dr. E., was justified in such a recommendation. He, Mr. S. was convinced that such doses of the medicine were unsafe, and would produce absorption of the glands, with general emaciation, as in Mr. Callaway's patient. [Mr. S. referred to the *Medical and Surgical Journal* after his observations, and, we need not state, supported the tenets of its editors as to the impropriety and danger of ex-

cessive doses of the remedy in question.—REP.]

Mr. Pereira observed, that he thought he could reconcile the parties at issue, on the subject under notice; as he could positively state that it was almost impossible to procure genuine hydriodate of potass in this metropolis. He had ordered different specimens, and found that they were adulterated to a great extent. He found 77 parts in 100 composed of carbonate of potass. Now this explained how it was that the medicine could be given with impunity in large doses. One of Mr. P.'s apprentices, on attempting to make the tincture of iodine, found the iodine, though pure, perfectly insoluble in a solution of the hydriodate of potass. The only place in London at which the genuine article had been procured, was at Mr. Garden's, of Oxford-street. It is very easy to detect the adulterated article by dropping a particle of the salt into some lime-water—if pure, no change will take place, but if impure the fluid will become milky.

Mr. Hooper then read an account of a case of cholera that happened in the Borough, and his statements were corroborated by Dr. Whiting, Mr. J. S. Evans, Mr. Smith, Mr. Millard, and Dr. Gilchrist. These, and all present, and there was a numerous meeting, considered the case, as well as the others subsequently detailed, as cholera. There was some diversity of opinion as to the blueness and morbid appearances; but space does not allow us to give a full account of the proceedings. There was nothing novel in the debate. Dr. Gilchrist, Dr. Johnson, and Mr. Edward Evans, the last who suffered from, and treated the disease at Warsaw, considered the cases cholera. He said that hot air and vapour baths, and calomel given in doses of ten grains every hour, were the chief remedies. Belladonna and bismuth were used by the Germans, but with no more success than attended the British practice.

Dr. Johnson was convinced that

mustard emetics—a table-spoonful of mustard in a small glass of water—repeated every ten minutes, was the best remedy. The action of vomiting equalized the circulation, and enabled us to take blood. The case of Webb, the soldier, at Knightsbridge, was certainly one of cholera; the lips and extremities were blue, and all the other characteristics were present.

The whole Society was unanimous in opinion that cholera was in the metropolis, notwithstanding the declaration in the reputed journal of the Central Board of Health to the contrary. There was no evidence whatever that the cases in the Borough or at Limehouse arose from contact with ships, or with persons from the north. There was no proof whatever of contagion. On Tuesday morning the bulletin from the Board, and the reports of the Parliamentary Debates, admit that the above cases were cholera. So much for the veracity of the Cholera Gazette, published by authority of the Board.

Westminster Medical Society.

Saturday, Feb. 11th, 1832.

GEO. JEWELL, Esq. in the Chair.

Sulphate of Quinine.—Cholera.

THE minutes having been read and signed, and some other business of the Society gone through, Mr. Hunt said he was desirous of ascertaining the experience of the society, in respect to the employment of sulphate of quinine in combination with ammonia. It had been recommended to him by Dr. Prout, and he had found it of great advantage, especially in those fevers in which the biliary organs were more especially affected.

Dr. J. Johnson had frequently employed the sulphate of quinine with

alkalies with success, especially in cases where there existed acidity of the primæ viæ.

Mr. G. Burnett was inclined to think that the action of the quinine, when given with alkalies, only proceeded from the latter being neutralized by the acids met with in the stomach, and he considered that the alkalies had a tendency to prevent the action of quinine, by rendering it less soluble.

The debate here appearing to flag, the President announced that Dr. George Gregory would detail a case, which had occurred lately in his practice.

Dr. G. Gregory stated that he submitted this case to the society, in the hope of ascertaining whether any of the members had met with any thing similar. The case had occurred in the practice of Mr. Robertson, of Jermyn-street: a young woman, 22 years of age, suffered from loss of sensation in the left foot, with extreme cold, and the member became of a blue colour; in a few days, Dr. G. was called in consultation, and he ascertained that there was some slight difficulty of breathing, for which she lost a little blood; he also discovered that there was no pulsation in the brachial and radial arteries of the left arm. After a few days, great inflammation and pain set in on the leg, and Mr. Robert Keate was added to the consultation. Disease of the heart was suspected. The limb became anasarcous, and the patient died. The intellectual faculties remained unimpaired till the last. On a post mortem examination, there was found a fungoid growth from the mitral valve, to which Dr. G. appeared to attribute the disease in the limb.

Mr. Costello, stated that the disease was not so unusual as Dr. Gregory supposed. The case, although imperfectly narrated, nothing different from one of *gangrena senilis*. He admitted that this denomination was

a bad one, as it occurred in the young, as well as the old. Mr. Costello said, possibly a disease of the heart existed, and begged to enquire, whether the heart was examined by the stethoscope? Whether there was oedema of the limb, and whether the state of the arteries of the limb was verified? To all of which questions Dr. Gregory replied in the negative.

Dr. J. Johnson severely criticised Dr. Gregory's neglect of the stethoscope, and advised him, should he ever meet with such another case, were it but for *curiosity's* sake, (*ap- plause*, instantly checked by the President,) to strip off *the shirt of the female*, (*laughter*, allowed to pass unnoticed,) and examine her chest with that instrument. He was desirous of knowing why Dr. Gregory attributed the state of the foot to the disease in the heart? He thought it owing to local affection of the arteries.

Dr. Gregory stated that he conceived that there was some analogy between this affection and gout, and would any gentleman attribute gout to an affection of the arteries?

Dr. J. Johnson inquired if Dr. Gregory wished to attribute gout to disease in the heart?

[An interruption was now offered to the prosecution of the debate, by the reading the Treasurer's report, from which it appeared that the circumstances of the society were more flourishing than they had been for the last seven years.]

Dr. Gregory, in alluding to the views taken of the case by the society, said that there was another light in which it might appear, and when he first saw the case, he went down to the Central Board of Health, (*laughter*,) to enquire if there were any cases recorded of partial asphyxic symptoms, of *partial cholera* (*renewed and continued laughter*); he was informed by the medical mem-

bers of the Board, that no such cases were on record.

Dr. J. Johnson observed that he had perused all the works published on cholera, and he must say that in the numerous cases on record, the blueness was confined chiefly to the nails, or to the extremities, &c.—it was a mistake to suppose it was always universal.

Mr. North observed that if Dr. Gregory wished to see a case of partial blueness, he need only refer to the last number but one of the *Lancet*, where he would find a case in which *the face was blue, and the extremities of a natural colour.* (*Laughter.*)

The President inquired to which case Mr. North alluded?

Mr. North—*the plate Sir, the plate of the young lady* (*renewed laughter.*)

Dr Johnson declared that his copy was ALL BLUE.

Dr. Fergusson stated that the copy in his possession, was only *partially blue.*

Dr. Whyte made some remarks on the blueness of cholera, and added that he could not speak positively on the subject, as nearly all his patients had been *blacks*, in whom the change of colour would not be evident.

Mr. Costello observed, that the terms of the conversation had become equivocal. Dr. Johnson said he would remove garments from the breast of the patient, which, except in masquerading times, were not usually worn by persons of her sex (*great laughter*). Mr. North spoke of his girl, in the *Lancet*, and Dr. Gregory, on observing the blueness of the limb, went down to the office, and posed the whole Board of Health (*renewed laughter*). Mr. Costello was sorry that cholera was again introduced, as he thought the society had had enough of that already; and he regretted it the more, as Dr. Gregory had introduced to their notice a subject of great interest—namely, arte-

ritis, which it would be interesting to discuss,

The President concurred with Mr. Costello, and expressed a wish that he would favour the society with a paper on this subject.

Mr. Costello regretted that the choice of the society was not better bestowed; but he would cheerfully undertake the task, and fulfil it to the best of his humble ability.

Royal Institution.

Friday, January 27, 1832.

GEORGE MOORE, Esq. F.S.A. Vice-President
in the chair.

Mr. Faraday on the Planariæ.

THIS evening, according to announcement, Mr. Faraday proceeded to lay before the literati assembled an account of Dr. R. Johnson's investigations into the *restorative*, *productive*, and *reproductive* powers of the Planariæ, a genus of small animals allied to the leech, and of which there are several known species, viz. *P. torva*, *lactea*, *hastata*, *arethusa*, *felina*, &c. the three first of which are to be found abundantly in a pond near the Red-House, Battersea-fields.

From Dr. Johnson's experiments it appears, that if an incision be made longitudinally into the head of the animal, so as to separate its eyes from each other, if the cut has not been carried very far down, it will heal in the ordinary manner; but if the head be absolutely cleft in twain, then, according to the extent of the fissure, there will be a mass of new matter formed by each half of the head, which will either join the two halves together, forming a head of extraordinary size, and bearing in it one or two additional eyes; or each old half, thus cleft, will form the new matter into another half, with

an eye, and so the animal have two complete and entire heads. If the fissure be carried farther down through the body of the animal, then not only will there be two heads, but two bodies also formed, joined together only by the tail, and when this is the case, so little unanimity does there exist between these *siamoid* twin-planariæ, that they never pull or swim the same way, and so violent are their efforts that they frequently, in the course of two or three days, tear the only remaining bond of union, their tail, in sunder, and then two distinct and perfect animals result.

If in a common planaria the head be cut entirely off, a new head will be formed; and if its lower extremity be removed, it will produce a new tail. In a planaria, which, by the operation above described, had been invested with two heads, these "*nova capita*" were successively severed for three several generations, and were immediately and perfectly renewed, and subsequently the animal was cut through just below the artificial bifurcation, and then only a single head was produced, so that in this more simple "*capital*" operation, a single-headed animal became a biceps, and after having had the use of six heads in succession, was subsequently reduced to the possession of a single one.

When one of these animals is cut in half, the head or anterior extremity swims away as if nothing had happened, and speedily re-tails itself; but the tail swims to the bottom, and remains torpid for two or three days, by which time it has formed for itself a head. If a planaria be cut into three pieces, the head will form a new body and tail, the tail a new body and head, and the middle section or body will produce both head and tail. If a quarter be removed by making a longitudinal incision through the head, and half down the body, and then a semi-transverse cut to

remove the upper quarter, not only will the three remaining quarters speedily reproduce a new fourth, but also the separated fourth will form to itself three new quarters. Indeed a planaria has been cut into as many as ten pieces, and each piece has become an entire and perfect animal. In fact this mode of propagation, which physiologists artificially institute, seems to be frequently resorted to by the animal itself. The planaria felina has been seen to throw off pieces of its body to form new animals, and these are not diseased but healthy parts, and not only parts of its tail, but often offsets from its sides, &c. Indeed, the planaria felina and P. arethusa have been never known to lay eggs, whilst the torva, lactea, &c. lay them in abundance, both the original animals and those artificially produced. It would seem that those species which inhabit springs and running waters propagate only by division; but those which dwell in ponds and ditches, where the water is occasionally exhausted, are oviparous, as well as viviparous.

The above facts are physiologically curious, as they shew a still closer affinity than had previously supposed to exist between the propagation of plants and animals by cuttings as well as seeds, for they have shewn that this mode of propagation can be carried to an almost equal extent in the one as in the other—an extent to which the experiments of Trembley and others on polypi, star-fish, &c. &c. did not reach.

On Friday, 3d of February, Mr. Griffiths gave some account of the Chemical Signs of the Ancients.—*Medical Gazette.*"

St. Bartholomew's Hospital.

CLINICAL LECTURE,

Delivered

By HENRY EARLE, ESQ., F.R.S.

February 1, 1832.

GENTLEMEN,

I HAVE just been called to a case in Powell's ward, which I think deserving of a few observations, from the practical utility to which they may lead. A man of sixty years of age, met with a serious injury of the right arm about a week ago; it appears that he fell off the curb-stone, and fractured the humerus below the deltoid muscle; and the shock he received, caused at the same time, what is supposed to be a dislocation of the head of the humerus. This complication, which is very rare, was not without danger, as from the state of the humerus, we should be prevented from using those means for the reduction of the dislocation adopted under other circumstances. The limb was very much swollen. This was supposed to have been a case of fracture and dislocation, but I entertain doubts on this subject. If the patient's account be correct, he met with only one accident. If this were a mere fracture of the arm, the injury would stop there, and the same force would not be carried in such a direction as to produce dislocation of the bone. I do not recollect many cases of this kind; there have been, however, a few, but under such circumstances as led me to imagine that they were not caused at the same time. One of the cases of this description occurred to the Bishop of ———, the brother of Lord Ellenborough; his Lordship dislocated the humerus by some accident, the head of the bone was depressed into the axilla: the bishop's family left him in order to procure surgical aid, and on returning found that he had fallen forward from the stool on which he had been left sitting; he fell on the arm, which appeared bent under him. I am convinced the fracture of the humerus, which was discovered on examining the limb, was caused by the fall, and not from the first accident. The bishop had now a very useful arm; he of course could not elevate it much, but the fracture was perfectly united. I have also met with a second case of the same kind. It was considered that it would be advisable in such cases to procure union of the fracture as soon as possible, and then reduce the dislocation, because such an attempt, and the force which it required, would not be safe in the first instance. It had been found useful in such cases as these,

to call to our aid some complicated machinery, which had been invented by a gentleman from Gloucester; this apparatus has been submitted to me, and it seems a very clever auxiliary; it acts as a powerful lever, it was to be applied to the whole length of the arm in cases like these I have been describing; but I am very doubtful if the present is one of this kind; I think it is a fracture of the humerus and a fracture of the neck of the scapula; and I am led to form this opinion from there not having been any force in the first instance; and also from the great facility of motion in the part, and the crepitus felt on pressing with the hand from above downwards; the extent of motion was very great, and such as never observed in dislocation of the head of the bone into the axilla. There seemed to be considerable displacement of the bone, but any attempt at reduction would have been imprudent, in consequence of the fracture of the limb, and as there would not be that length of lever necessary for reducing the luxation. This was a case worthy of particular attention, as was every case of fracture and complicated injury of the joints, and I shall lose no opportunity of bringing under your notice every instance of the kind. Indeed no class of cases give rise to more serious litigation; they were often the subjects of prosecutions, which, in some instances, proved the ruin of the surgeon, and were carried on with great cruelty; however, it must be admitted, that on many occasions there were proper grounds for having recourse to legal measures, and where the medical men ought to have been better informed. Such mistakes would fix lasting disgrace on the surgeon, and as such things were likely to occur, particularly in complicated cases, I shall take every opportunity of calling your attention to any that may occur from time to time in this place, so as to put you on your guard against accidents of this description.

Since the above was delivered, the patient has died; and the following is the *post mortem* examination:—

The position of the limb was very remarkable, but more approximated to the side than during life; the axis of the humerus was in a measure broken, that of the upper half being directed obliquely outwards from the trunk, whilst the lower portion corresponded with the inclination of the fore-arm, which was pronated. The whole extremity was very œdematous, more especially the fore-arm, hand and fingers, the cuticle of which part was completely raised by the fluid; there were several gangrenous patches on the fore-arm, and in the neighbourhood of the elbow. Upon cutting into the integuments, there was effusion of a yellow serous fluid to a great extent; the veins were completely engorged with dark blood, the muscles altered in texture and appearance, were

soft and flaccid of a palish brown colour. After raising the pectoralis major, the head of the bone was felt beneath the clavicle, which upon rotation communicated a sensation of crepitus; upon elevating the pectoralis minor, there was an escape of a considerable quantity of a yellowish brown seropurulent matter, which had been contained in the cellular membrane, existing between the last named muscle and the capsular ligament, which was unruptured in this situation. The capsular ligament was found exceedingly distended with a fluid, which upon evacuation shewed the same character as that contained external to the capsule. The head of the humerus was completely denuded of its cartilage, resting beneath the clavicle, with its convexity directed against the first intercostal space and the surface of the second rib, whilst the greater tuberosity was in contact with the venter of the scapula near its neck; the whole of the tendons of the rotator muscles inserted into the tuberosities were torn from their attachments to these parts, and the portion of the scapula, pressed upon by the humerus, was denuded of its periosteum. This explained satisfactorily the feeling of crepitus, which was manifested during life upon rotation of the bone. The vessels and nerves were pushed forward, by the projection of the head of the humerus, and completely impacted between it and the second rib, so that they must have impeded the circulation to a very great degree. The glenoid cavity was found to be entire, as likewise the neck of the scapula. No fracture of the humerus existed in any part of its extent, and it was never ascertained that the extreme distension of the integuments, by the serous infiltration, had caused the deception in the appearances of the limb, so as to render the suspicion of fracture so very probable, whilst the pressure existing upon the vessels, sufficiently explained the condition of the cellular membrane; and it is very surprising for the same reasons, that the pulse was at all discoverable at the wrist. Mr. Earle observed, that the probable cause of their remaining in ignorance of the true nature of the case so long, was the great state of inflammation and tenderness existing in the whole extremity at the time of the patient's admission, which rendered a proper examination highly dangerous, and impossible.

Review.

A Demonstration of the Nerves of the Human Body; founded on the Subjects of the Collegial Prizes for 1825 and 1828, adjudged by the Royal College of Surgeons. By JOSEPH SWAN. This Part completes the Anatomy of the Sympathetic Nerve. Part III., containing the Cerebral Nerves, will be published in the ensuing spring. Longman and Co.

THE publication of this splendid work must be a source of pride to the profession in this country, as it is certainly not surpassed in beauty, fidelity, or accuracy, by any illustration of the nerves hitherto attempted. Mr. Swan is known to the medical world as one of the first physiologists of our time; while his acquaintance with minute anatomy is manifested by the great skill displayed in his representations of the distribution of the visceral nerves, of the thorax, and abdomen, in the parts of the work now before the public.

There is but one fault to be found with this production, which is, its great expense. It is necessarily an expensive work, but, certainly, the sum of five guineas for the delineations of the thoracic and abdominal nerves, is most unreasonable. According to this scale, we should suppose that the demonstrations of the nerves of the head, of superior and inferior extremities, which perhaps will make three other parts, will cost seven guineas and a half more; so, that when complete, the representations of the whole nervous system will amount to twelve guineas. This may be very right, in the opinion of the publishers; but we must inform them, that nine-tenths of the medical profession cannot become possessed of a work, which is eminently entitled to a place in every medical library.

The age for publishing works at extravagant prices has terminated; and the general opinion of all men now is, that the benefits of science should be subservient to the interests of every class of the community. The great bibliopolists of the Row seem to think otherwise, at least, on the present occasion, when they have the modesty to require five times the value of a work, which is certainly equalled as to utility by Borremann's Plates, published under the revision of Mr. King. We can perceive no use in giving four representations of each plate, three of which are wholly unnecessary; and their places might be very well supplied by delineations of other portions of the nervous system. This work is one of the most splendid hitherto published in this country, and richly deserves the encouragement of the affluent portion of the profession.

Anatomical Atlas of Dr. M. J. WEBER, Professor at the Royal University at Bonn. London, 1831. Parts III. and IV.—A. Schloss.

THE enterprising spirit of Mr. Schloss, in publishing this splendid work, with regularity, well deserves the patronage of the profession. These parts represent the four layers of muscles of the adult size, on the front and back of the body. These are faithfully delineated, and with the explanatory text, enable the anatomical student to acquire a general knowledge of the muscular system. It is scarcely necessary to state, that all the anatomical professors and lecturers of the metropolis have spoken in the highest terms of the execution, accuracy, and cheapness of this work, and have strongly recommended it to teachers, students, and surgeons, who have not opportunities of refreshing their memory on anatomy. We have added our testimony to the same.

effect. Appended to these parts are illustrations of the organs of respiration, of the nose, heart, fœtal circulation, membranes of the ovum, and organs of digestion. The forthcoming parts will represent the nerves and blood-vessels of the full size.

Elements of Diagnosis, General Pathology, and Therapeutics. By ROBERT NORTON, M.D. M.R.C.S. 8vo. pp. 100. London, 1832.—Jackson.

THIS is a useful and instructive work, and will be studied, with much advantage, by students. Had Dr. Norton made it much larger, and added chapters on nosology, ætiology, semeiology, and prognosis, his production would be more valuable. We think the theological preface and appendix are misplaced, and uncalled for. The vast majority of the profession are not irreligious, nor never have been.

Cholera; its Character and Treatment. With Remarks on the Identity of Indian and English; and a particular reference to the Disease, as now existing at Newcastle. By CHARLES TURNER THACKRAH. 8vo. pp. 60. Leeds, 1831.—Baines and Co.

THERE is much sound sense, and as much science in this production, as in any we have seen on cholera. The high scientific attainments of the author are well known to the profession. His work on the Diseases of Trades, Professions, &c. has acquired him just reputation as a surgeon of no ordinary attainments.

Comparative View of Cholera Morbus, during the last thirty years, in Ireland, and during the last fifteen, in other Countries: illustrated by Cases. By WILLIAM STOKER, M.D. &c. 8vo. pp. 34. Dublin, 1832.—Tims.

THIS is the production of a physician of great experience; and so far as it relates to the progress of cholera in Ireland, is a valuable record. The cases are instructive. Our great press of matter, at present, deprives us of the pleasure of extracting the author's views, many of which are original and ingenious.

THE

London Medical & Surgical Journal.

London, Saturday, Feb. 18, 1832.

As Mr. Green has thought it expedient, by a very remarkable silence with respect to us, since the publication of our last number, to furnish to the world a very intelligible commentary on the propriety of his late inconsiderate attack—we feel ourselves relieved from the necessity of dwelling any further on the principle which we are prepared to contend for in his case. We can only say, that to the maintenance of that principle we are pledged, and that, as far as we are able, we shall vindicate it, no matter what the consequences may be.

In the lecture of Mr. Earle's which we publish this week, will be found the account of a very remarkable case, which has just occurred at

St. Bartholomew's Hospital. It appears that a considerable time subsequently to the period of the accident, the patient was admitted into the hospital, under the care of Mr. Earle. The arm of this man was the seat of a large general œdematous tumour; the glenoid cavity of the shoulder appeared to be empty; and there was distinct crepitus. The case was thought to be fracture of the humerus, with dislocation. Extension, in such a case, with a view to reduction, was entirely out of the question. The patient died; the body of the man was examined, and dislocation, simply, was found.

At the first view of this case, a critic, who was not disposed to be very just or impartial in his judgment, would complain of erroneous treatment. But we have seen professional gentlemen, in whose experience and knowledge we would place the most implicit confidence, who have carefully examined the patient, and who all declared, that the investigation led them to the conviction that the humerus was fractured. Setting aside altogether the little chance there was of such men as Mr. Earle, and his able colleagues, committing a mistake through want of adequate knowledge, we take the authority of professional men, altogether unconnected with the hospital, when we say that an attempt at reduction in this case would not have been allowed.

Mr. Earle, with that candour

which no man of talent, or who deserves eminence in his profession, will ever lose sight of, acknowledged that he had been mistaken, and was amongst the foremost to impress upon the pupils the lesson which the circumstances of this case so strikingly afforded. He told the pupils, that a heavy responsibility rested upon that man who first was consulted in this accident, when no swelling existed; and when, consequently, the nature of the injury must have been perfectly apparent. But no attempt at reduction had been made in this early stage, and it is, therefore, fair to conclude, that the character of the injury had been misapprehended. Mr. Earle said, that the person consulted was not a professional man, as he understood, but merely what was called a chemist, and therefore one who ought not to have undertaken the treatment of a case so difficult and important as this.

ARRIVAL OF CHOLERA IN LONDON.

THIS long-dreaded epidemic is said to have appeared in London, and to have taken its course along the Thames. There is no trace of contagion, and on the strictest inquiry of the relatives of those who have died of the disease, there is no suspicion of its importation, or of its communication by personal contact. Such is the conclusion of the various physicians and surgeons who have seen the sufferers

during life, and who have visited their relatives while surrounding the dead bodies. This was the unanimous opinion of the eminent practitioners whose names will be found in our report of the proceedings of the Medical Society of London, on Monday evening last.

Here then is direct and positive proof of the utter inutility of quarantine; here is incontrovertible evidence of a fact well known to all conversant with medical literature, that epidemic, or rather pandemic diseases, defy, and ever have defied, the mounds and barriers which mankind in all countries, and at all times, have erected to arrest their progress.

It is vain and useless to attempt to extinguish prevailing cholera—it has appeared in by far the greater part of Europe, in utter defiance of human intervention. Is the disease contagious? It is not, if we believe those who have seen most of it. Will it attack the affluent who reside in open and airy situations, whose aliment, comforts, and habits are of a superior description? We fearlessly answer in the negative: it will be, and hitherto has been, confined to the poor, the distressed, the badly fed, the badly clothed, the filthy, and the intemperate. Among these, and these alone, will it prevail to any extent. All the statements made in this and the other European countries in which it has appeared, lead to no other conclusion. It will be

chiefly confined to low, damp, and ill-ventilated districts, and will visit only a few of the effeminate luxurious inhabitants of our squares.

It was stated by several medical practitioners of the highest respectability, at the Medical Society, on Monday evening, that they found the wife and children of the man Sullivan in the apartment with the dead body, the coffin unscrewed, and all the survivors in perfect health. Had any of these become affected from the certain predisposition which must result from fear, and from the locality of their dwelling, it is only what might be fairly expected. No such thing has as yet happened. (Tuesday, 3, p. m.)

From the preceding statements, it must be manifest that the intended bill about to be passed for farther restrictive measures, for extending the power of the Privy Council, will prove injurious; and we boldly predict will neither arrest the progress, nor materially assist the faculty in preventing the spread of the disease.

Some of our worthy contemporaries will, for certain reasons, rend the skies with doleful lamentations on the contagiousness of cholera. Those who have hitherto been among the alarmists will understand us. But let them beware—the disease may not do great mischief—and may suddenly disappear, as it has done elsewhere, when the public mind is most alarmed about it.

It can do comparatively little mis-

chief in the first city in the world, where affluence, personal comforts, cleanliness, salubrity of situation, and universal benevolence of the upper classes towards the poor, are unequalled by any city on the face of the earth. These are not imaginary, but real advantages and amply sufficient to prevent the bad effects of exaggerated alarm. The Lords of the Council have directed a notice to the Custom-house, commanding that no clean bill of health should be given to any vessel leaving the port. (Three o'clock, p. m. Tuesday), thus stopping every description of commerce, and throwing thousands of the lower classes into distress. Such is the baneful influence of the contagionists.

We have perused, with the utmost attention, all the works on cholera, and our perfect conviction is, that the Asiatic form of the disease has not appeared in any part of this country. What then it will be asked is the disease now prevalent amongst us? We answer, a modification of common English cholera. Has the disease appeared for the first time in the metropolis during the last week? We deny it, we have repeatedly seen it, since the last autumn—We would prove this before Parliament or any competent authority. This is also the opinion of those distinguished medical men, Dr. Uwins, Dr. Johnson, Dr. Gilchrist, Mr. King, &c. &c. If we refer to the writings of Sydenham, to the *Encyclopædia Britannica*, to the

able essay of Mr. Thackrah, to the works of Professor Christison, Dr. Mackintosh and a host of others, we find that English cholera has presented every symptom of the disease now prevalent, and has proved fatal in as short a space of time. If we are asked to account for the spreading of this disorder, we can readily reply, that the unnatural condition of the seasons, in every part of Europe for the last three years, and the unusual mildness of the present winter, afford a sufficient explanation. Let those who doubt our position refer to *Sydenham's Account of English Cholera in 1669*, in which they will find an account of as general and as fatal a disease as the present. The spasms, lividity or blueness of the skin and oppression of the pulse, are not new symptoms; all have been frequently observed in the English disease. We also must bear in mind that Dr. Russel, Dr. Barry, Dr. Chervin, Mr. Searle, Mr. Evans, and all who have observed the disease in Poland, Russia, Sunderland and elsewhere, admit that it differs from Asiatic cholera; and is a modified form of the disease, or in other words, is not the Indian disease. We have this day (Thursday) seen the resolution of the Medical Board of Rotherhithe, declaring that *no case of Asiatic cholera* occurred there; and that the inhabitants had not been so healthy for a long time.

We also find that 1331 individuals, up to this date, have died in this

country of diarrhœa and cholera ; but what an insignificant number if the disease were contagious. If the bills of mortality were published, we should discover this number merely proportionate to the deaths from ordinary diseases.

We have no hesitation in declaring our solemn conviction that the Government is misled by the Central Board of Health. Let us only have a public inquiry, let us have those who have seen most of the Asiatic disease, and those who have carefully perused the works lately published, on the subject, together with the conductors of the medical press, and those who observed the disease in this country, and then, and only then, will an accurate and correct opinion be placed before the public ; and we would pledge our lives, that the exaggerated and groundless alarm, now almost universal, would cease. Let the Government select 100 of the most scientific and experienced physicians and surgeons in the metropolis ; let these convene for one month only, and the result will be most satisfactory to the country.

When we look at the members of the present Central, and other Boards, we observe the names of men unknown in the annals of medical science ; men whose opinions have no weight with the profession, however injurious they are to the country, by inducing a good government to claim a penal statute, and to tax and harrass the people, without real necessity.

As further proof of incompetency of the Central Board, we must state, that this day we observe on every corner of the streets, their advice as to the best mode of treating cholera ; and their alarming declaration, that the disease is contagious. We hope and trust that the public press will aid us in exposing the incompetency of this imbecile Board ; and procure for the nation the establishment of a Board such as we suggest, in which the utmost confidence could be placed. In public and in private we have maintained our opinion, that *there is no Asiatic cholera in this country, but the common endemic disease in an aggravated form, and that THIS DISEASE IS NOT CONTAGIOUS.* Could the Government be convinced of the accuracy of these conclusions, they would remove their baneful quarantine regulations, and not destroy the commerce of this great country, and further pauperise the lower classes of the community, or, in plain language, predispose them to the disease.

Our strictures on the present Board of Health may appear harsh. To a really efficient Board there can be no possible objection ; on the contrary, the country stood in need of so valuable an institution ; and now that it is formed, we should prefer defining its duties, to abolishing it, on the cessation of the present alarm. Such an institution exists on the continent, where it renders the most valuable services, in advising the govern-

ments on all measures appertaining to the public health—such as the choice of salubrious localities for public works, hospitals, prisons, manufactories, slaughter-houses, shambles, markets, &c; the examination of the qualities of food and drink, and the detection of the deleterious ingredients with which they are adulterated; the examination of medicinal substances, which, for want of a similar Board, are now adulterated to such extent, that it is scarcely possible to obtain them genuine any where—so that the beneficent efforts of medical science are rendered nugatory by the inefficiency of the substances which it is forced to employ; the analysis of patent medicines, and in restraining the cupidity of quacks and quackery, in general, which press so impudently upon the credulity of society.

CROTON OIL IN CHOLERA.

DR. HACKETT, of Trinidad, has transmitted to us a graphic description of the West Indian fevers, which present all the formidable symptoms of cholera. He has found croton oil a powerful antispasmodic in such cases, and suggests its employment in cholera. He refers to a case of tetanus, published by Mr. Lawrence, in which the remedy proved extremely beneficial. Dr. H. has found it the best remedy in colic, of “dry belly-ache,” after all other medicines had failed. He denominates it a “sovereign and infallible remedy” in spas-

modic diseases; and he states, that he never procured the article genuine, except from the patentee, Mr. Short, of Radcliffe Highway. We think the suggestions of Dr. Hackett well worthy of attention under existing circumstances, and we understand they will be attended to in the proper quarter. At 10 o'clock, p. m. on Thursday, the progress of cholera in the Borough was very limited, and all the cases in that district were convalescent.

The Hunterian Oration.

THE delivery of this annual oration devolved, in the present year, on Professor Cooper of the London University, who on Tuesday last, acquitted himself in the theatre of the College of Surgeons, with the same ability, industry, and learning, which he brings to every task that he undertakes. When we consider the number of dissertations on the character, talents, and scientific achievements of John Hunter, which the foundation of the Hunterian lecture alone has produced. we shall perhaps be in a situation to understand the extreme difficulties which that man has to encounter, who is required to produce something novel, or interesting upon such a theme.

Minds of the greatest ingenuity, and endowed with various powers, have been directed to it: they have considered it in its diversified bearings, they have employed in its illustration, all that science and industry, and original talent could contribute, and they may be said to have left nothing naturally connected with the subject unnoticed or explained. Hence the greatest possible indulgence, ought in justice to be

extended to those, on whom the duty of panegyrising, John Hunter is still of necessity imposed. A perusal however, of Mr. Cooper's oration would soon satisfy any reasonable person, that the exercise of indulgence towards him was by no means called for. Our reporter who attended the theatre has laid before us an accurate report of this able oration, but as Mr. Cooper has informed us that the Council of the College has intimated its wish, that he should publish the lecture, we abstain from communicating it to the public. We must however observe, that our forbearance in this instance, must be looked upon as not prejudicing, in the slightest degree, our *right* to publish Mr. Cooper's lecture.

The theatre was crowded to excess. We observed amongst the audience, besides nearly all the members of the Council, Mr. Davis Gilbert, late President of the Royal Society, the venerable Dr. Babington, Dr. Elliotson, Messrs. Earle, Green, Langstaff, &c. &c. In looking round on the assemblage, we could not help remembering that one of our professional contemporaries undertook to prophesy with great confidence, that the theatre on the occasions of the delivery of the lecture, would be attended only by the Council and the "toad eaters" of that junto."

Well!—if the audience which we saw in the theatre be the toad-eaters of the "junto," we can only declare that we had rather the "junto" should keep them in food and luxuries than we. The resources which would be sufficient to maintain such a body of toad-eaters, on permanent duty, seems to us to be not exactly within the scope of the College Council. At least, we conclude, that they would, ere this, have got tired of the sacrifice of their haunches of venison, for the very disproportionate purpose of leaving a large posse of parasites to applaud their feats.

Mr. Cooper went over the course

of Hunter's life, dwelling sometimes with great force and copiousness of diction, and at other times with a display of the finest powers of fancy, on such parts of his illustrious career as yielded the most obvious materials for his purpose.

Towards the conclusion of his lecture, he alluded to the loss which the country and the profession had sustained, in the recent death of Mr. Abernethy, of St. Bartholomew's, and Mr. Headington, of the London Hospital. His eulogy of the former combined a greater degree of justice, with panegyric, than has hitherto been awarded to that distinguished and eminent surgeon.

Mr. Cooper intends publishing his lecture, at the express request of the Council. We, therefore, in *courtesy*, but by no means as *a matter of right*, abstain from inserting our reporter's notes of the lecture.

Hospital Reports.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

A Dr. Seeds has lately been trying a new remedy for certain inflammations of the eye, on an extended scale, under the superintendence of Mr. Guthrie. He applies it externally over the temples, brow, cheeks, and lips, and it is passed up into the nostrils. We saw a little girl with chronic inflammation submitted to this treatment, and in twenty minutes after, the vascularity had considerably diminished. The remedy requires repetition three times a day, and, we may add, that internal treatment, suited to each case, is likewise employed. We have reason to believe that it is a composition of æther and ammonia:—℞ Sp. æther, s. c. ʒ ss; sp. arom. ammoniæ, ʒ j; sp. camphoræ, ʒ j; ꝑ ft. linim.

Its beneficial effects appear to depend on its causing a great evapora-

tion in the neighbourhood of the inflammation. So confident is the Doctor of the value of his nostrum, that he declared that if he had possessed it thirty years ago, it would have saved him his right eye, which is disorganised by the results of deep-seated inflammation.

ST. BARTHOLOMEW'S HOSPITAL.

Fracture of the Cranium with Compression of the Brain.

ON Sunday the 28th ultimo, Sarah Smith, aged 40, was brought to this hospital. The persons who carried her there stated that she and her husband had had frequent quarrels, and that she often threatened to throw herself out of the window of the room which they occupied, and which was on the two pair story of a house in Lower Thames-street. This fatal resolution she carried into effect, on the day above mentioned, and was almost immediately after the accident brought to the hospital. She appeared to have been totally deprived of sensation, volition and the power of the mental faculties. Her breathing had that peculiar stertorous noise, which forms so prominent a symptom in compression of the brain. The pupils were somewhat dilated, but the irides were motionless. A large lacerated wound of the scalp was observed on the upper and back part of the head. Mr. Lawrence, who happened to be in the hospital at the time, instantly proceeded to the patient. He having great reason to expect that a fracture of the skull had taken place, he enlarged the wound with a scalpel. Copious bleeding followed from the divided vessels, several of which required ligatures. About twenty ounces of blood were lost.

The symptoms of compression being still very manifest, Mr. Lawrence concluded that the operation of tre-

phining would be necessary—but he thought it prudent to wait a short time. After the lapse of eight or ten minutes he returned to the ward, and found a very great alteration in the condition of the patient. The pulse rose considerably in power and frequency; the breathing became more free from the stertorous character which it had recently assumed, and the complete return of sensation was indicated by a variety of signs. The intention to trephine was necessarily abandoned. Strong purgative medicine and a blister between the shoulders were ordered.

At five o'clock, p.m. the stertor was, to some degree, renewed—the circulation became feeble—tremors came on, and the hands and feet had lost their natural temperature. The extremities were warmed by hot applications, and a little diluted wine was administered.

Eight o'clock, p.m.—Skin very hot; pulse full; breathing stertorous; the patient has been convulsed. A common enema was ordered, and a large quantity of leeches to the head. Towards morning she seemed much disturbed, and talked incoherently; the leeches were repeated.

On Monday, at noon, Mr. Earle saw her. Her mouth was then drawn to the right side; she rambled much in her conversation, but answered questions that were directly put to her. Bleeding from the arm, to twelve ounces, and the administration of castor oil, were ordered. She spent a wretched night; the symptoms of delirium became more manifest; a mucous rattling in the throat came on, and she sunk at about two o'clock on Tuesday morning.

Post Mortem Examination.

The cranium having been denuded, a fracture was detected, which reached from the back part of the right parietal bone, just beneath the lacerated wound of the scalp, across the squamous portion, and along the anterior

and inferior border of the petrous portion of the left temporal bone, as far as its anterior extremity. It was doubtful if the sphenoid did not also partake of the injury. A large coagulum of blood lay between the inner surface of the squamous portion of the bone and the dura mater; and the middle meningeal artery was found ruptured very nearly to, if not actually in that part, which just penetrates the foramen rotundum.

The dura mater having been removed from the right hemisphere of the brain, a large stratum of coagulated blood was found covering the tunica arachnoides; again a considerable quantity of blood was found at the base of the same hemisphere. When the substance of the brain was divided, many minute points of blood were seen, which indicated the rupture of small blood-vessels. These appearances were particularly multiplied at the base of the right hemisphere; and all those parts in which blood was thus minutely effused, were much softer than natural. An unusually small quantity of fluid was found in the ventricles.

GUY'S HOSPITAL.

Typhus Petechialis.

THE following case illustrates the typhus fever now prevalent, and deserves attention.

Thomas Mullins, æt. 30, a labourer, was lately admitted under Dr. Cholmeley. Was seven days ill, has been accustomed to hard labour, and his habits were intemperate. He has enjoyed good health, and is the father of seven children. This account was given by a relative, as the man was delirious. His symptoms are, tongue dry, and covered with a white fur; skin moderately warm; pulse 96, small and feeble; eyes dull and heavy; great pain in the head, and petechiæ on the external surface.

Rad. caput, et app. embrocat. com.

capiti. Habeat hyd. subm. gr. ij; pulv. ip. c. gr. viij; 4tis horis.

Ten o'clock, p. m. Is no better.

App. emplast. lyttæ nuchæ. Inj. enema c. oleo ricini.

Three o'clock. Has spent a restless night; has made much noise, and speaks incoherently; bowels not opened; blister has not risen; tongue coated with a greenish white fur; face flushed; eyes heavy and dull; skin dry and warm; has vomited about 3x, of a greenish fluid; was ordered a dose of castor oil this morning.

Habeat hydrarg. subm. gr. viij. sacchari purif. gr. v; fiat pulvis statim sumendus. R. Infusi menth. vitriol 3iss. tertiis horis sumend.

Five o'clock, p. m. Powder was vomited; is more restless and violent.

Nine o'clock, p. m. Pulse 126, small and feeble, and hands cold: ordered wine and ammonia—the latter he refused.

Eleven o'clock, p. m. Is much worse; pupils dilated, and insensible to light; face of a deadly white; pulse very weak and feeble; hands colder, and feet warm. He became convulsed for about a minute, and then expired without a struggle. A quantity of urine escaped after death.

Autopsy, thirty-eight hours after death.—On opening the head, the brain appeared congested, and on being incised, presented many bloody spots: it was healthy in other parts. The heart was flabby, and contained some fluid blood; lungs congested, and on being cut, presented a red, lobulated, or inflamed appearance. The stomach contained a large quantity of greenish fluid; its mucous membrane being inflamed and softened. The liver was perfectly healthy, spleen enlarged and softened, and the kidneys congested. Numerous petechiæ were seen on the intestines, similar to those on the external surface of the body. The bladder was very much distended, and contained nearly three pints of urine; its fundus and surface were ecchymosed.

SIR ANDREW HALLIDAY'S

CLAIMS AS THE FIRST WHO INTRODUCED
IODINE INTO BRITISH PRACTICE.

To the Editors of the *Medical and Surgical Journal*.

GENTLEMEN,

IN the first number of your Journal, which has just reached me, (and which Journal, allow me to say, if conducted with anything like the spirit and ability with which it has commenced, will soon become one of our standard Periodicals, and be in the hands of every member of the profession,) I find some observations on the therapeutical properties of Iodine, from the works of Drs. Lugol, Manson, Gardner, and others. If there is any merit in having been the *first* to draw the attention of British practitioners, to the therapeutical properties of iodine, or to have been the *first* to prescribe it with success, in various diseases in this country, that *merit* is certainly due to Sir Andrew Halliday, who having witnessed its effects, as a remedy in several diseases on the Continent, not only prescribed it himself, but recommended it to the attention of his friends, on his return from France in 1819; and if you will turn to the *London Medical Repository*, for September, 1821, you will find a paper (No. 4, of Original Communications) detailing the various preparations of this remedy, their uses and advantages, and strongly recommending them to the notice of the profession, this being the *first* publication respecting the properties of the iodine, and Sir Andrew Halliday being the physician that first introduced it into practice, in this country, it is but fair that his name should be associated with Lugol, Manson, and those others, who have assisted in introducing the use of this valuable remedy in British practice; true, he did not publish a *volume* on the subject, but his short paper on the use of the different preparations of iodine

ought not to be lost sight of by subsequent writers on this subject.

FAIR-PLAY.

New Instrument for performing the operation of Tracheotomy.

[Extract from Mr. Lawrence's Surgical Lecture, delivered on Monday, February the 13th inst.]

MR. LAWRENCE, in his surgical lecture on Monday evening, the 13th inst. observed, that in performing the operation of tracheotomy, the surgeon was frequently very much confused, and the operation itself rendered hazardous, from the extensive effusion of blood from the veins situated in the course of the incision for opening the trachea, which, if it entered the tube, might produce suffocation. Mr. Wood, late house surgeon of the hospital, he said, had paid a great deal of attention to these circumstances, and had devised an instrument which was calculated to prevent such an occurrence. This instrument he exhibited to his class, and with it performed the operation on the dead subject. It consisted of a curved trochar, the canula of which was somewhat greater in its diameter than the one used in paracentesis abdominis, and curved at its further extremity, having a radius of about 90°; its stilette was furnished with three joints, so as to permit it to assume the curved form when in the canula, and after the introduction of the instrument into the trachea, to allow of its easy removal. Mr. Lawrence remarked that this instrument would answer every purpose, when the operation was rendered necessary by obstructed respiration, from inflammation of the larynx and glottis; and that it had the advantage of the common trochar, in preventing the possibility of wounding the posterior wall of the trachea, and of the operation of cutting the rings of the trachea by its maintaining a *permanent* opening.

Notices to Correspondents and List of Books in our next.

University of London.

OBSERVATIONS

ON

VENOUS ANEURISM,
AND ANEURISMAL VARIX;FROM THE
SURGICAL LECTURE,

Delivered Feb. 13,

BY

PROFESSOR S. COOPER.

GENTLEMEN,

The *venous aneurism*, *aneurismal varix*, or *varicose aneurism*, is a pulsating swelling of a vein, arising from a preternatural communication, formed between such vessel and a neighbouring artery. The situation in which this peculiar disease commonly presents itself is the bend of the arm, where it is produced by the unskilful performance of venesection, the lancet completely transfixing the median basilic vein, and piercing the subjacent artery.

The venous aneurism may, however, occur in any situation, where a large artery and vein are near each other. Hence a few examples are recorded in which the disease took place in the ham, thigh, and upper part of the arm, in consequence of gun-shot and other wounds. When it follows bleeding, or a punctured wound, there are two wounds in the vein, and one in the artery, besides the puncture in the fascia.

The external wound in the vein heals, while the internal remains permanently open; thus allowing the blood to gush directly from the artery into the vein, which becomes dilated, sometimes to the size of a pigeon's

egg; the two vessels and intervening fascia are united together by the adhesive inflammation.

However, instead of the artery and vein being always thus connected by the adhesive inflammation, so as to afford a direct passage to the blood, an interspace is sometimes produced between them by the blood being effused in the cellular membrane in which a sac is formed; and this being placed between the two vessels, the blood is first discharged from the artery into it, and afterwards into the vein. It is to the latter form of the disease that Mr. Hodgson restricts the term *varicose aneurism*, while the case in which the blood flows directly into the vein, he calls *aneurismal varix*.

These forms of the disease are certainly sufficiently different to require different names; because one is really a false aneurism, conjoined with a venous aneurism; and what proves the truth of this observation is, that the communication between the sac and vein may close, and then the aneurism of the artery takes its usual course, and requires operation, as was illustrated last summer in a case that was in St. Bartholomew's Hospital.

Upon the table, gentlemen, you see a specimen of a varicose aneurism, with a bifurcation of the humeral artery high up the arm. It was taken from a subject, in whom the radial division was punctured in bleeding. It was a double aneurism, formed under the fascia, with a communication kept up between the arterial aneurism and the vein through an opening in the fascia. The anastomosing branch between the radial and ulnar arteries, you may remark, is as large as either of them.

When a venous aneurism follows a gun-shot wound, in which the ball has passed between a large artery and vein, so as to open a direct communication between them, there is of course only one opening in the vein, and not two as after venesection.

I believe there is but a single example of the spontaneous production of an aneurismal varix upon record, and the case, which is related by Mr. Syme, in the *Edin. Med. and*

Surgical Journal (Vol. 36. p. 104), is a very remarkable one, as the aorta and vena cava communicated by a large aperture, a little above their bifurcation into the iliac vessels.

In the common form of the aneurismal varix, a communication is established between the median basilic vein and the brachial artery. The consequence is, that the vein becomes large and tortuous, as you see represented in this excellent model of a varicose aneurism now before us. The tumour communicates a jarring, thrilling sensation to the hand which examines it, and a peculiar hissing sound is heard when the ear is applied to the part.

After the swelling of the vein has attained the size of a pigeon's egg, it generally does not become larger.

If the artery be compressed above the swelling, the latter becomes flaccid, and can be emptied of its blood. In general, a slight weakness of the limb is the worst effect of the disease. Sometimes, however, it becomes cold from the want of its usual supply of arterial blood, a great part of which, instead of proceeding to the further part of the limb, flows into the vein, and returns back to the heart. Hence also there is scarcely any pulsation at the wrist; but the brachial artery, above the tumour, is larger than natural, and pulsates with unusual force.

A case of this description was brought to my house a few months ago from Deptford. The patient was a washer-woman, who had imprudently allowed some unprofessional person to bleed her. The hissing noise, and thrilling sensation in the tumour and adjacent veins were well exemplified. As the case was recent, I recommended pressure, and as the patient has not made her appearance for some time, I conclude, that she is either cured, or not suffering much inconvenience from the complaint.

In general, the aneurismal varix requires no operation, as it becomes stationary, and does not cause very serious annoyance. But if it were to be conjoined with an aneurismal sac between the two vessels, so as to constitute what Mr. Hodgson proposes to call the venous aneurism, then an operation might become necessary, in the event of the sac shewing a disposition to enlarge and give trouble. Here it would, perhaps, be necessary to tie the artery above and below the opening in it. But in consequence of such practice being likely to be attended with some difficulties and severity, I would myself only apply one ligature above the tumour, and act afterwards according to circumstances.

We should not, however, resort to the operation, without a real necessity, for one case, recorded by Mr. Atkinson of York, after having been operated upon, proved fatal.

In the early stage, pressure, by means of a compress, is the right treatment, or else with an instrument calculated to compress the

swelling, as was once successfully applied by Sir Astley Cooper, to an aneurismal varix in a young lady under his care.

If an arterial aneurism were to accompany the venous, would it be right to apply pressure?—I believe not; because you could not expect thus to cure the arterial aneurism, and if you were to cause an obliteration of the communication between such aneurism and the vein, an operation would certainly become necessary for the cure of the latter disease. In fact, the free passage of the blood from the arterial aneurism into the vein, is the surest means of preventing its enlargement. This is a point in surgery which I do not find noticed by writers, but it is worth considering; and the case in St. Bartholomew's Hospital is a confirmation of the tenor of these remarks.

St. Bartholomew's Hospital.

SELECTIONS

FROM THE

CLINICAL LECTURES,

Delivered by

HENRY EARLE, ESQ. F. R. S.

Case of Congenital Malformation of the Bladder in a Female.

GENTLEMEN,

THERE is now in Sitwell's ward a young girl whose case is of a very singular nature. She was in this hospital four or five years ago, when this drawing that I now show you, of the appearance which her abdomen presented, was made by Mr. M'Whinnie, one of the present house surgeons. The girl came to this hospital at that time, with the view of ascertaining if, by the aid of any mechanical contrivance, I could afford her relief from the peculiar inconveniences which she suffered on account of a congenital malformation of the bladder. After some trials I was able to provide an instrument, by the use of which the patient was placed in a comparatively comfortable condition; but as this instrument was made of silver, some petty thief, attracted by its value, stole it from the girl, and it is in consequence of this privation that she has once more applied to the hospital.

This you may regard as a very rare case, and one which you may not have another opportunity of seeing. Any gentleman of

the hospital who is curious upon the interesting point of congenital malformation, and who wishes to have an opportunity of personally inspecting the case, will readily receive from me the facility of doing so in the sister's room. But it is proper to remember, that the patient is now advanced to the age of fifteen, a state of maturity, when, as you must be aware, it is likely that she should be more alive than before, to the degradation which the indiscriminate exposure of her peculiar conformation, would, in her own opinion, produce. On that account, it is necessary that a reasonable degree of delicacy should be exercised towards her, and I am convinced that you will feel with me, that the same measure of respect which you would pay to the feelings of a female patient in private practice, is equally due to her who seeks your gratuitous advice in a hospital. At least, I will take the liberty of saying, that upon such a conviction I have uniformly acted myself.

Gentlemen, the malformation in this case consists of a complete absence of the anterior part of the urinary bladder, and of a protrusion forwards of its posterior wall through, or, to state the case more correctly, between, the muscles and those common integuments, which, in the natural state, protect that viscus. The ureters have each an external orifice, at the inferior part of the protruded portion of bladder. There is, then, resulting from this condition of the parts, a permanent *stillicidium urine*—or rather the ureters being enlarged, allow a slight quantity of urine to collect, which is subsequently voided by small and very frequent jets. The ureters have sufficient muscular power to eject the water.

In looking at the peculiar appearances to which I have alluded in this case, you will perceive a red, vascular, pulpy, mucous surface, the size of half an orange, protruding at the lower part of the abdomen. This is the mucous surface of what, in the natural state, would be the internal surface of the posterior wall of the bladder. Immediately behind it is the cavity of the peritoneum, which is only separated from it by the muscular and cellular coats of this rudiment of the bladder. Hence we find that, in the erect posture, the tumour is more protruded forwards, and that it constitutes really a hernial sac, which, when the patient is standing or sitting up, is filled with the ordinary contents of the abdomen. At the upper and lateral parts of this vascular tumour, there are appearances of cicatrization, the results of several attempts which were made, when this girl was before in the hospital, to destroy that highly sensible and vascular surface, by means of escharotics—a mode of treatment which I shall hereafter advert to. This vascular surface is exquisitely sensitive, and it

secretes an abundant quantity of mucus, which protects it from the action of the urine as well as of the air.

At the lower part of this tumour, as I have before observed, the ureters terminate; their external orifices being separated from each other to the extent of about an inch. The mucous membrane is more prominent just at the point of their termination. Below this protrusion in the centre there is a smooth surface, which is analogous to the perineum, and which extends to the anus. About half an inch below the lower margin of the tumour, on attentively examining this smooth surface, I perceived two very minute spots, from which a milky, and evidently a mucous secretion exuded. On introducing a small probe, it entered a cavity which, no doubt, is the vagina. I carried my finger into the rectum, and I could feel distinctly a fully developed virgin uterus, at a shorter distance from the extremity of the vagina than can be found in the natural state of those parts. These minute openings either did not exist when this patient was under my care on the former occasion, or if they did exist, they must have escaped observation. I am of opinion, then, that I am justified in supposing that these openings are of recent occurrence. They are evidently larger at this time than when the patient was admitted; and the central band which separates them is much thinner and narrower. This alteration corresponds with the other changes which have recently taken place, and which are to be referred to the progress this girl has made towards the age of puberty. It is well worth your while to consider the very curious provision which nature adopts, when by the process of gradual absorption, she causes these changes in the animal structure which the advance to a state of maturity requires. There is now on either side of this smooth surface a bifid clitoris, and rudiments of nymphæ; and the interval between them is to the extent of an inch, when the legs are brought together. These parts, when the girl was formerly under my care, were in close contact, even when the legs were separated. In these changes, then, you see the operations of nature, who, as it were, paves the way for those great purposes which she has in view; and I have no doubt that ultimately such an alteration will be completed by natural means, as will enable this girl to procreate her species.

On the outer sides of this smooth surface may be seen the labia; they are flattened and imperfectly developed; are much separated above, but approximate as they descend, and are beginning to exhibit some of the signs of approaching puberty. That this female will be capable of procreation I do not entertain the slightest doubt, since all the essential organs of generation belong to her.

Now, if we examine this case more closely, and by the touch, we shall discover a considerable interval existing between the *osssa*

pubis: this interval, indeed, corresponds with the whole width of the protruding mass. The *recti* muscles are separated for some distance above the tumour; and in order to gain their attachment to the ossa *pubis*, they are made to diverge on either side. The intervening space above is occupied by tendinous expansions and peritoneum, whilst the wide interval between the ossa *pubis* is connected merely by a band of ligament. The absence of bony support in this part, you will naturally believe, is a great impediment to progression; and it was from this cause, that when she was first under my care, she had a rolling, waddling, and insecure gait. This peculiar movement is now much less perceptible; a change which, probably, depends not on any fresh supply of bone, but on the increased strength of the ligamentous support; and perhaps also from the employment of a spring truss. At all events the fact is so, that the imperfect gait of this female is far less remarkable now than it was at the former period.

You find, gentlemen, upon examination, no traces of an umbilicus. It is most probable that the umbilical vessels entered just above the tumour, but no remains of an umbilicus can at present be distinguished.

The case which I have now described to you, in addition to its extreme rarity, presents many interesting circumstances well worthy of your consideration. In the first place, we learn from this malformation, in connection with other cases of a similar nature, that the bladder is not one of those organs which are essential to life; at the same time we know, that it greatly contributes to the convenience and comfort of the individual. In the next place, cases of this description afford us the most favourable opportunity for natural, physiological, and pathological experiments. Thus we have the rare advantage on this occasion of being able to see numerous phenomena, belonging to the healthy, as well as to the morbid functions of the mucous membranes, and to determine the chemical properties of mucus. The mucous membranes you are aware, are generally hidden from our view, and, in almost all instances, the mucus itself, which we obtain for the purposes of experiment, is mixed more or less with excrementitious matter, or other extraneous substances. But in the present case, we have under our immediate observation, the whole phenomena of these membranes; and we can examine the mucus in a state perfectly free from the admixture of all foreign secretions, inasmuch as the tumour is out of the reach of any exudation of urine, in consequence of the low situations at which the ureters open. You will be able to study with great advantage in this case, the structure and vital properties of mucous surfaces, and from the phenomena, which the surface

presented to your view exhibits, you will be able to understand the fallacy of those physiologists who would assimilate mucous surfaces with common integument. We find here, that not only has this mucous membrane remained unchanged after such a long exposure—not only has it retained all its original vascularity—its natural pulpy aspect—its secreting powers, and excessive sensibility—but it has absolutely resisted every attempt of mine to destroy the surface, and to produce a general cicatrization; measures which I was anxious to complete, in order, if possible, to produce an alleviation of the girl's sufferings.

It is really wonderful to consider how rapidly the mucous membrane was regenerated, after each effort to obliterate its surface. Day after day we employed the nitrate of silver, sulphate of copper, potassa fusa; but still the membrane was reproduced. Nothing, I found, at length, but strong nitric acid could act with sufficient power to destroy it; but I did not deem it prudent to continue the employment of this active remedy; as I apprehended that its use might, perhaps, bring on peritonitis, seeing that the action of the acid, when once applied, could not be controlled.

The inferences to which these facts give rise, are quite in opposition with the doctrine which Haller and other physiologists, but more particularly Mr. Mayo, have laid down. This gentleman says—"There is a remarkable analogy between the skin and mucous membranes. The latter may be viewed as prolongations of the skin, over internal surfaces, modified only to suit the difference of place. Or the skin may be said to contain the elements of the mucous tubes, but more firmly wrought and protected by the cuticle, as the latter are protected by the mucus they secrete. The skin consists of a dense white substratum, analogous to the tunica nœva of the alimentary canal, and of a vascular surface, analogous to the mucous or villous membrane." Bichat and others were of the same opinion; and they believed that a mucous membrane is only a modification of the integument, and that, by long exposure to air, it will lose its peculiar character, and assume that of common integument. The familiar instances of prolapsus ani, and of prolapsus vaginae, are adduced as proofs of this; and hence Bichat is disposed to generalize, and to suppose that all mucous surfaces may be made to take on the character of common integument, and that the whole extent of the mucous membrane possesses a very fine covering of epidermis, which is capable of becoming thicker on exposure, and of even assuming the properties of common integument.

The case now under consideration, gentlemen, affords, I think, a very striking exposition of the fallacy of such doctrines. In truth, in certain situations, the cuticle can be

traced, as it covers mucous membrane, to a defined distance, as in the mouth, for example, or at the entrance of the anus, or that of the vagina. In some of the lower animals, cuticle exists on the mucous membrane of the stomach. Now where the cuticle in any of these cases is exposed to the air, it will, in all probability, be converted into integument. It is quite impossible, however, for me to admit that mucous surfaces are capable of producing a cuticular covering; and with respect to the opinion that cuticle is thrown off from the mucous coat of the intestines, I do not believe it to be the case; I am persuaded that it is lymph, and not cuticle, that is formed on their internal surface, and that is thus thrown off. At all events, here is a case where a mucous membrane has been exposed to the air, and exposed too, from the period of the girl's birth, and yet no attempt that has been made could succeed in producing a cutis over its surface. The same thing is observable in cases of artificial anus, exposed urethra, and particularly in cases of vesico-vaginal fistulæ.

In the latter instance the difference between the two membranes of the bladder and vagina, which, however, are continuous, may be at once determined by the eye. Doubtless, in the situations which I have mentioned, the delicate cuticular covering expanded over the mucous structures will, on exposure, be converted into common integument, or some structure greatly resembling it. We know, indeed, that the mucous linings of old sinuses lose their characters on being laid open and exposed to the air; in other words, by the conversion of them into superficial sores, they are deprived of their excretory power. But such is not the case, as the example now to be seen in this hospital amply proves, with the more internal and natural mucous membrane of the bladder.

[Mr. Earle's second lecture, on this remarkable case, will be given in our next.]

LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

WE have much pleasure in informing our readers that the Lectures at the Royal College of Surgeons will commence on Tuesday next, 28th inst. at 4 o'clock, p. m. The first division of the Course will be on the Anatomy and Diseases of the Eye, by Mr. GUTHRIE; and the second division, on the Comparative Anatomy of the Nervous System, by SIR CHARLES BELL.

LECTURE,

On the Comparative Anatomy and Physiology of the Organs of the Voice.

BY

JAMES RENNIE, M.A.

Professor of Zoology, King's College, London.

GENTLEMEN,

THE views which have been taken by physiologists and comparative anatomists, of the mechanism of the voice in man, as well as in other animals, are so different, that it is by no means easy to reconcile them. Galen, the celebrated physician, compared this mechanism to a flute, very naturally supposing it to be altogether of the nature of a wind instrument;* and, in modern times, M. Doder† has advocated the same opinion, maintaining that the tones vary according to the expansion or contraction of the orifice of the wind-pipe (*glottis*). M. Ferrein and Dr. Young, on the contrary, have compared it to a violin, or a harpsichord, the vocal chords formed by the sinews or ligaments constituting the orifice of the wind-pipe; being supposed to perform the office of strings, while the air acts upon these like a bow.‡ In man this orifice, when it is brought into its narrowest compass, is diminished about one-third of its length, and is then not more than one twenty-fourth to one-twelfth of an inch in width, and about half an inch in length, the sides, or lips presenting a sharp edge directed upwards and inwards, which have, with considerable propriety, been termed the vocal chords.

Other physiologists take different views from both those of Doder|| and Ferrein;|| and amongst those M. Scratzenstein imagined the opening of the wind-pipe to resemble a drum with the head divided;§ Blumenbach and Soëmmering think it is more analagous to a flute, a pipe, or to an Æolian harp—a stringed instrument played upon by the wind.¶ M. Magendie, again, who has given a very elaborate description of the organs of the voice, refers us to those instruments whose sound is produced by a reed, such as the hautboy, and the clarinet.** We may

* De Usu Partium.

† Mém. de l'Académie pour 1700, p. 244 et pour 1707, p. 66.

‡ Mém. de l'Acad. pour 1741, pp. 409-22; Haller, *Elementa Physiologiæ*, ix. 31, 17; Young, *Lect.* i. 400; and *Phil. Trans.* for 1800, pp. 141-2.

|| Mém. de l'Acad. 1700.

§ *Tentamen Sonorum Vocabulum*, 4to. 1781.

¶ Blumenbach, *Instit. Physiolog.* by Dr. Elliotson, ix. 87; and Soëmmering, *Corp. Human. Fabric.* vi. 93.

** *Physiologie*, i. 207-8.

remark, however, respecting this hypothesis, ingenious as it is, that the various tones of the voice are produced, not by stopping the holes at different distances, as in those reed instruments, but by varying the width of the wind-pipe at its orifice or outgoing, where the principal organs are situated, and also the length of the tube of the wind-pipe.

Another well-known physiologist, M. Richerand,* questions the fact of the voice being similar to a reed instrument, and goes into a learned argument to prove, that the voice is both a wind and a stringed instrument at the same time. The voice, he remarks, becomes stronger and fuller, and passes from the acute to the grave as the orifice of the wind-pipe enlarges with the progress of age; and it remains always weaker and sharper in women, who have the orifice nearly a third smaller than men. The tension or relaxation, however, of the vocal chords may, perhaps, enable them to execute, in a given time, vibrations more or less rapid, in such a manner, as if the air expelled from the lungs in breathing struck upon them in a state of tension, produced by the action of the muscles.

Mr. Ferrein's comparison of the voice to a violin has been objected to, from the consideration that, in order to perform the office of vibrating strings, the vocal chords ought to be dry, tense, and insulated—the threefold condition required for the production of sound in stringed instruments. But, notwithstanding the incompleteness of their resemblance to strings, the vocal chords are similar to the vibrating bodies, serving as mouth-pieces to wind instruments, such as the reed and haut-boy; the mouth-hole of flutes, the lips themselves, in the horn, do not the less contribute to the formation and varied inflections of vocal sounds.

So far as I am able to judge, the organ in question (*larynx*) represents a reeded wind-instrument with a double plate, the tones of which are more acute as the plates are shortened, and more grave the longer they become. Although this analogy, however, be generally correct, it does not necessarily follow that it is complete in every part. The common reeds of instruments, in fact, are composed of rectangular plates, fixed on one side, and free on the other three. In the vocal organ, on the other hand, the chords or reeds are, indeed, rectangular, but they are fixed by three sides instead of one. In the common reeded instrument, again, we raise or lower the notes by varying its length; while, in the plates of the vocal reeds, it is the size which is varied. In musical instruments, besides, we cannot employ nor procure reeds, the plates of which can every instant alter their thickness and elasticity, as happens in the vocal chords. It can easily be conceived, then, from these circumstances, that the vocal chords may produce

and vary the tones of the voice, somewhat after the manner of reeded instruments, though I cannot make out the analogy in every particular.

M. Magendie partly proved these views by actual observation; and, in the instance of dogs, he found, when the sound uttered was grave, the vocal chords vibrated through their whole length, and that the expired air passed through the whole extent of the orifice (*glottis*.) When the sounds were acute, on the other hand, the vocal chords did not vibrate in the front, but only in the back part; and as the orifice was, of course, diminished, the air only passed through the vibrating portion. When the sounds again became very acute, the vocal chords no longer vibrated, except at the very extremity, and the expired air then passed out only at this part. So far as he was able to ascertain, the sound increased in acuteness, till the orifice became entirely closed; when the air could no longer pass, the sound ceased.

That it is the vocal chords, whose vibration produces the sound, may also be fairly inferred from experiments made after death; for by taking the wind-pipe of any quadruped, and blowing strongly from below upwards, no sound will be produced so long as the orifice remains expanded, but, if while continuing to blow, the orifice is compressed, so much as to bring the inner surfaces into contact, a sound will be produced somewhat resembling the voice of the animal from which the wind-pipe has been taken. The sound, also, will be more or less acute, or grave, according as the lips of the orifice approach each other, and will be more intense, when we blow with most force. Again, when an opening is made into the wind-pipe, either in man or other animals below the orifice, the voice is destroyed, but will be restored if the opening be mechanically stopped.

Magendie says, he knows a man, who has been in this situation for many years, and who cannot speak, except when his cravat, which closes a fistulous opening in the wind-pipe, is drawn tight.

Contrary to the general character of "speaking" animals, which Linnæus has too hastily given to his class *mammalia*, there are several, such as the anteaters (*myrmecophagæ*), and the 'pungolins (*manes*), even according to his own description, altogether dumb,* while the dog is said to lose its voice in the West Indies, and the same is reported of quails in Siberia.† It seems, indeed, to arise from the greater or less degree of perfection with which the orifice of the wind-pipe is formed in the classes of animals possessing this, that the voice is rendered more or less perfect; and it is by the number of

* *Systema Naturæ* in loco.

† Pennant Arch. zool. ii. 320.

* Physiologie, by De Lys.

membranes or muscles in its general structure, or a variation in the shape, position, or elasticity of those most common to it, that quadrupeds and most other animals are capable of making those peculiar sounds, by which their different kinds are respectively characterized, and are able to neigh, bray, bark, or roar; to purr as the cat, and the tiger; to bleat as the sheep; and to croak as the frog. The frog, however, has a sac, or a bag of a singular character in the throat or cheek, directly communicating with the orifice of the wind-pipe, on which the croaking principally depends.*

In birds, again, the wind-pipe is very different in structure from that of other animals, and in song birds is peculiarly and admirably adapted to that sweet and varied music, with which we are so often delighted in the woodlands. The whole extent, indeed, of the wind-pipe in such birds may be regarded as one vocal apparatus; for the upper part (*larynx*) is divided into two sections, or may rather, perhaps, be considered as two distinct organs. That which is more complicated, or in which the parts are more numerous and elaborate, is placed at the lower end of the wind-pipe, at the place where it divides in order to be distributed through the lungs; the more simple, or that in which the parts are fewer, and consisting of those not included in the former, occupies its usual situation at the upper end of the wind-pipe, which, however, is destitute of the valve or lid (*epiglottis*) which is found in man. From this view of the vocal organs in birds, we may consider their lungs and wind-pipe as forming a natural bag-pipe, in which the lungs constitute the pouch and supply the wind,—the wind-pipe itself forming the chanter, or pipe; the lower, or more complicated parts (*glottis inferior*) being the reed or mouth-piece which produces the simple sound; and the upper part (*glottis superior*) the finger holes, which modify the simple sound into an infinite variety of distinct notes.†

Dr. Macartney has justly remarked, that "a very little comparison of the mechanism of wind musical instruments, with the organs of the voice in birds, will shew how nearly they are allied to each other; and it may be observed, that the sound produced by some of the larger birds is exactly similar to the notes that proceed from a clarionet or hautboy in the hands of an untutored musician. The inferior glottis exactly corresponds to the reed, and produces the tone or simple sound. The superior larynx gives it utterance, as the holes of the instrument; but the strength and body of the note depend upon the ex-

tent and capacity of the trachea, and the hardness and elasticity of its parts. The convolution and bony cells of the wind-pipe, therefore, may be compared with the turns of a French horn, and the divisions of a bassoon; and they produce the proper effects of these parts in the voices of those birds in which they are found."* The Abbe Arnaud compares the voice of the hooping swan (*cygnus ferus*—RAY) to the sound of a clarionet, winded by a person unacquainted with the instrument.†

In birds, however, we meet with a very considerable diversity in the structure of the vocal organs, particularly in the length and thickness of the tube of the wind-pipe; and that not only in different species, but often in different sexes of the same species, and especially among water-fowl, as was observed even by the earlier naturalists. Aldrovandus, for example, whom it has been the fashion to consider as a mere fabulist, has given a very excellent account of the wind-pipe of the wild swan (*cygnus ferus*—RAY) from his own observation, which we shall here translate.

"The structure of this wind-pipe," he says, "is worthy of high admiration; for, in descending along with the gullet, when it arrives at the throat, it does not, as in other animals, enter the lungs in a straight line, but rising over the shoulder blades (*claviculi*) it passes into the keel of the breast-bone, which keel is seldom composed of a single bone, but consists of two sides with a third resting upon them, by way of cover, the whole forming a sort of sheath or tunnel.

"When the wind-pipe arrives at the extremity of this sheath, it bends downwards, in a serpentine form, resembling the letter S; and again, beneath the portion just described, it emerges from the sheath, and rising upwards over the middle bend of the shoulder-blade, it winds, thus supported, in the manner of a trumpet. Upon its passing under the cavity of the chest, and just below it reaches the lungs, as if to form another vocal organ (*larynx*), it is transversely cut (being as broad as the small bone is long) and a thin membrane stretched over the opening, the whole resembling in figure and texture, the split-reed of those musical instruments, commonly called trombones, so much esteemed in church service, and which are widest at the lower end, with a similar fissure. Below this the wind-pipe devaricates into two branches, both of which enlarge towards the middle, and are directly ramified through the lungs."‡ Dr. Latham's description is, that "the wind-pipe in the wild swan passes down

* Rees's Cyclopædia, Art. Birds.

* Good's Study of Medicine, i. 429, 2d Edit.

† Ibid. p. 461, 2d Edit.

† Buffon, Ois. Art. Cygne.

‡ Aldrovandi Ornithologia, iii. 6. Ed. Franck.

the neck the whole of its length, after which it enters the keel of the *sternum* (breast-bone), passing backwards therein nearly the whole of its length, when it bends upwards and forwards, and then enters the cavity of the breast, to communicate with the lungs.*

As this curious structure is not found in the tame swan (*cygnus mansuetus*, RAY,) Willoughby very justly remarks, that, "Aldrovand doth not rightly infer that Aristotle never dissected this fowl, because he makes no mention of this ingress, and of the strange figure of the wind-pipe." He adds, "of tame swans we have anatomized many, and in all have observed the wind-pipe to descend straight down into the lungs, without any such digression or deflection."† Buffon, however, in conformity to the theory which vitiates so many of his details, maintains that the difference of structure "is insufficient to constitute two distinct species; for the variation exceeds not the sum of the impressions, both internal and external, which the domestic habits may in time produce."‡

Recently, Mr. Wingate has discovered that there are two species of wild swan, differing remarkably in the conformation of the wind-pipe. Bewick's swan, (*cygnus Bewickii*, YARREL,) in the adult state, has the wind-pipe of equal diameter throughout, enters the keel of the breast-bone, through which it passes to the end, where, inclining upwards and outwards, it passes into a cavity formed in the body of the bone, by the separation of the bony plates, and producing a convex protuberance on the inner surface of the breast-bone. In this cavity the wind-pipe assumes a horizontal direction, and makes a considerable curve, reaching within half an inch of the posterior edge of the breast-bone. It then returns to the keel, along the upper part of which it passes to the exterior edge of the bone, over which it is reflected to enter the body of the bird, and become attached to the lungs. On the other hand, in the wild or hooping swan (*C. ferus*,) the wind-pipe never assumes a horizontal direction, and does not even penetrate within the keel to the extent of one-half of the breast-bone.||

One of the best accounts we have met with of the vocal organs of birds, is by M. Herissant, according to whom, the principal apparatus consists of membranes, varying in thinness and expansion, in different species. In such birds as the goose, which is admirably described by Haller,§ there are four such membranes, resembling, in figure and disposition, the reeds of a hautboy, and disposed

in pairs. But though these membranes, which are more or less distinct, according to the species, are the principal vocal organs, they are not the only ones; for M. Herissant discovered many others in the interior parts of the lungs. These are placed transversely upon one another, and their texture and disposition resemble spiders' webs, as may be seen in the figure.* These membranes, so delicate, and placed one above the other, and all ready to vibrate, present a spectacle which no naturalist can fail to admire. Each of these membranes is somewhat of a crescent shape, and attached by the circular circumference to the sides of the tubes, inclining a little towards the end whence the air passes which comes from the lungs, and which cannot pass without exciting them more or less to vibrate.

Besides the membranes just described, which are met with in all the birds M. Herissant examined, there are others variously placed over certain bones and cartilages, of different forms, some situated towards the middle part of the wind-pipe, and others lower down. These are also met with in certain waterfowl of the duck tribe. There is found, moreover, in all birds, another membrane, differing in thickness, and so essential, that without it no vocal sound could be produced. This is situated almost transversely between the two horns of the crescent shaped bone (*furcula*), and there forms the termination of the cavity in the upper and inner part of the chest. All these organs being put in play by the air, in the lungs, they jerk and vibrate more rapidly, according to the rapidity of the passage.†

At the request of Mr. Pennant, the celebrated John Hunter examined the vocal organs of many singing birds, and found that the loudest songsters have the strongest muscles. The sky-lark, whose clear and vigorous note is often heard when he can no longer be followed in his ascent by the most penetrating eye, was found to have these muscles strongest. Mr. Hunter also observed that, among singing birds the muscles of the male, following the same rule, are stronger than those of the female, whose voice is always less powerful; yet it is not a little remarkable that he could discover no difference in the vocal organs of the male and female, in birds which do not sing. Baron Cuvier again found, in all singing birds, five pairs of constrictor muscles, namely, two before, two behind, two small, two oblique, and two transverse; while in most birds which do not sing there is in general only one pair.‡ The most minute account of the action of these muscles has been given by M. Meckel in his work on comparative

* Linn. Trans. iv. 106. tab. xii. fig. 1, 2.

† Willoughby, Ornith., by Ray, p. 356.

‡ Oiseaux. Art. Le Cygne.

§ Trans. of the Nat. Philoph. Soc. of Newcastle, for 1831, and Zool. Journ. v. 258.

§ Element. Physical.

* Mem. de l'Academie des Sciences, pour 1753, p. 292.

† Op. cit. pour 1753, p. 229.

‡ Annales des Sciences Naturelles, xxiii. 32.

anatomy, and by Dr. Beunatis;* but it would be difficult to present any intelligible statement of their details in an abridged form.

All these observations, however, are by no means new, for the famous Jesuit, Athanasius Kercher, gives a minute and surprisingly accurate account of the vocal organs of the nightingale, which we shall now translate. "In the first place," says he, "we find its tongue very short, but the other vocal organs (*larynx*) fibrous and muscular in an astonishing manner, though the other parts do not differ from other birds. We, therefore, conclude that all the power and variety of its notes are produced from innumerable fibres, by which the vocal chord (*glottis*) is either tightened or relaxed, projected forwards or drawn inwards, and bent in every direction, the tongue performing the office of a bow (*plectro*) in eliciting the several notes. I further infer that those guttural warblings, called *trills*, which professional singers make in the throat, are not formed by the tongue, but immediately by the vocal chords; and that this trilling is solely produced by the expiration of air striking on the vocal chords."†

From the inquiries of such of the more modern physiologists, which we have examined, it does not appear that they have paid sufficient attention to the influence of the tongue in modifying the sound of the voice; though it will appear from some of the facts which I shall presently state, that this influence is probably considerable, even if we should not go so far as Kircher, in representing it as the bow, or quill, which produces the sound, at least in the nightingale. Aristotle had observed the shortness of the nightingale's tongue, which he says "wants the tip;"‡ and Pliny, that "in common with the blackcap, (*atricapidea*) it has not the slender tip possessed by other birds."|| F. Sanctius says, "I can positively aver that the nightingale has no tongue, unless my eyes deceive me."§ Aldrovand, on quoting the above passage, remarks, "A few days since, one of my friends brought me a nightingale in a cage, and when we had taken it out, we could hardly observe the smallest vestige of a tongue; which circumstance excited in me considerable wonder, that this little bird should have such sweetness of song, and such vibration of voice, and yet be without a tongue, unless it were by chance concealed in its throat. Poets, therefore, were not far from the truth, when they sung, that the nightingale's tongue had been cut out. But whether their story be correct, I leave to be decided

by others. But as many as I have seen (and I have seen a great many) had all a very distinct tongue. Some admit that the story, among poets, of the nightingale's wanting a tongue, originated from Philomela having her tongue cut out by Thereus, and deduce from this a plausible argument, that the nightingale is in reality deprived of the tip of the tongue."*

Now, recurring to the comparison of the organs of the voice to a reeded wind instrument, it has been maintained by Dutrochet and Cuvier, that the tube, which conveys the air to the reed, has no influence whatever on the sound produced. M. Biot, however, relates an experiment by Mr. Grenié, which proves the reverse of this. It is not impossible, that the lengthening or shortening the wind-pipe, which is the tube for conveying the air to the vocal chords, may have some influence in the production of the voice, and on its different tones. This tube, indeed, may be lengthened or shortened, enlarged or diminished in diameter, being susceptible of assuming an indefinite number of different forms, it will fulfil very well the office of the body of a reed instrument; that is, it will possess the power of arranging itself, so as to harmonize with the vocal chords, and thus favour the production of all the numerous tones of which the voice is susceptible. It will increase the intensity of the vocal sounds by assuming a conical form; by enlarging externally, it will give them an agreeable rotundity; or by arranging the external opening conveniently, it will nearly suppress them. But till natural philosophy has determined with precision the influence of the tube in reeded instruments, we can, at least, only form probable conjectures. In consequence, however, of form, position, elasticity and movement, the tongue in the nightingale, like the valve or lid (*epiglottis*) of the orifice in man, seems to constitute an essential part of the apparatus of the voice, independently of its office of contracting the vocal tube. M. Grenié, who has invented so many ingenious and useful modifications of reeded instruments, at one period of his investigations, wished to augment the intensity of the sound without changing the reed. To effect this, he was obliged to augment gradually the intensity of the current of air; but this, though it rendered the sound stronger, had likewise the effect of elevating the note. The only remedy for this inconvenience, which M. Grenié could discover, was, to place obliquely in the tube immediately above the reed, a flexible, elastic tongue, resembling very much the similar apparatus in animals.

* Leçons d'Anat. Comparée.

† Kircher, Musurgia, lib. I.

‡ Hist. Anim. ix. 15.

|| Hist. Nat. x. 22.

§ Commen. in Al. Emb. 701.

* Aldrovandi Ornithologia, ii. 339.

Medico-Botanical Society.*February 14th, 1832.*

LORD MAHON in the chair.

AFTER reading the minutes, and announcing the presents, Dr. Chownde and Mr. Stewart were admitted by the Noble President as ordinary Fellows.

Lord Mahon then rose, and informed the society, that, according to his latest advices from Germany, Earl Stanhope, he was happy to state, would return in the course of a month (applause); he (Lord Mahon) felt both pleasure and pride in the applause of this society, and he assured the meeting, that his father, Earl Stanhope, felt great pleasure in forwarding the objects for which the society was instituted, and which were so ably seconded by all its members. Medical men had always been famed for skill, prudence, and perseverance; but to these they must now add another qualification, namely, courage, in consequence of the introduction of a contagious malady amongst us within the last few days, and, added the Noble President, it would bring fresh honours to the society, should a member discover a remedy for this pestilence among the vegetable kingdom.

Dr. Clendinning then proceeded to deliver his introductory lecture on toxicology, which will be found in an early number of this journal.

Mr. Everitt, the professor of chemistry, announced that he was engaged in some experiments on prussic acid, which were nearly complete, and the results of which he would lay before the society at their next meeting. He was well aware that many medical men laid aside the prussic acid entirely, because they could never obtain it perfectly uniform; and to obviate this objection to the use of this acid, has been the object of Mr. E.'s experiments. Mr. E. also stated, that he would illustrate his lecture with appropriate experiments.

A pause ensuing, Dr. Sigmond arose, and remarked, that as Dr. Negri was present, and he had published a paper on the use of bark in cholera, he hoped that he would favour the society with some remarks on that subject.

Dr. Negri then addressed the society, and claimed their indulgence as a foreigner, in case he should not express himself in proper terms (applause). He drew his inferences from the great resemblance between the remarkable pathological symptoms of cholera, and those of a class of diseases in Italy, called the pernicious intermittent fevers, so well described by Torti. The resemblance was as fully marked in the rapid progress of the disease, the fever frequently destroying life

in a few hours. In the Italian disease, most of the characters of cholera were present, with the exception of the non-evacuation of urine, the rice water stools, &c.; but the Doctor appeared to consider the resemblance chiefly to consist in the extremely fatal rapidity of each affection, and the corpse-like appearance of the sufferers. The disease of Italy has the name febris perniciosa cholericæ, and resembles considerably the sweating sickness, according to Dr. Negri. Bark having been found of great benefit in stopping the progress of the Italian affection, the Doctor is induced to recommend its trial in cholera; the dose, a drachm, to be repeated often, according to effect. Dr. N. seemed to think that there was an intermission in cholera, but scarcely marked from the great severity of the disease.

The meeting shortly after adjourned until Tuesday, the 28th. This was the fullest assembly we have witnessed this session.

Westminster Medical Society.*February 18, 1832.*

DR. STEWART in the chair.

THIS was the fullest meeting we have witnessed since the cholera debates.

The minutes of the last meeting having been read and signed, Messrs. Randolph and French were elected ordinary members. Mr. North gave notice that at an ensuing meeting he should propose M. Halma Graud as an honorary fellow of the society.

Dr. Webster then brought forward two cases of aphonia, interesting as far as regards the nature and seat of the disease. Dr. W. stated that loss of voice had been generally attributed to some disease of the glottis, or the vocal organs themselves; but in these cases he attributed it to a paralytic state of the nerves supplying these organs, dependant on an affection of the cerebrum. It is well known that affections of the brain will cause a disordered action in organs at a distance from it, and of which Dr. W. adduced many examples, which need not be mentioned. The first case was that of a lad named Wright, 16 years old, a groom by occupation. When he first came under Dr. Webster's care he was suffering under bronchitis, which was soon removed; as that affection disappeared, however, an extinction of voice gradually came on, until it became nearly perfect. There was neither pain in the throat nor chest, nor dyspnoea; but Dr. W. discovered that there was severe head-ache, with dilated pupil; and these symptoms led him to attribute the aphonia to head affection, more especially as the voice improved as the head-ache and dilated pupil got better. There were also present deafness,

and singing in the ears; blisters to the temples, aperients, with conium at night, relieved this boy considerably, and he gradually became convalescent.

The second case was that of a woman named Ellis, 21 years of age, married, but has had no children. She was treated at first for dyspeptic symptoms, which were relieved by appropriate treatment; in the course of which the voice gradually became hoarse, and finally failed. She was also afflicted with deafness, head-ache, tinnitus aurium, giddiness, &c.; among other symptoms a dilated pupil was prominent. She recovered by the employment of similar treatment to that used in the preceding case. Dr. W. has also had two other cases of a similar kind, in which the same treatment met with the same success. In connexion with these cases he narrated the following: a young woman suffered from a violent and almost constant cough, with great expectoration, in which there was also an affection of the head, indicated by head-ache, dilated pupil, &c. Dr. Webster, remembering the marked success obtained by directing his treatment to the head in the foregoing cases, determined to give it a trial in this case, and, accordingly, applied a blister to the nape of the neck, which prevented coughing for twenty-four hours, when it gradually returned; leeches behind the ears again removed it, but it has again returned, in some degree. A second blister to the neck has been directed by the doctor, and he is in hopes that it will effectually cure the complaint.

Mr. Hunt inquired if there were any pectoral affection in the first two cases?

Dr. Webster replied in the negative.

Mr. Hunt then made some remarks on aphonia, which he attributed in general to a want of muscular power; but the cases related by Dr. Webster were essentially different from those he alluded to.

Dr. Gilchrest here observed that there were several gentlemen present from the Borough, and proposed that the subject of cholera should be entered on.

The President said that it was usual to wait for some time for the remarks that might be made on the paper under consideration, ere a new subject was broached.

Dr. Somerville then advised that the present discussion be adjourned until the next evening, to which he was certain Dr. Webster would yield a ready assent.

Dr. Webster having given his consent—it was proposed by Dr. Whyte, and seconded by Mr. Chinnock, that this discussion be adjourned till the next meeting.—Carried.

Dr. Gilchrest was then called on to open the discussion on cholera, which he begged to transfer to the Borough gentlemen; but ere he did so, he remarked that the debates of the last meeting had been erroneously reported, and he hoped that reporters would be more careful for the future. He was proceeding with this topic, when the call for cholera be-

came so powerful that he was obliged to give up his intention.

Dr. Whyte then rose with the intention of opening the debate, but was interrupted by Dr. Blicke, who was anxious that the question should be—whether it was THE CHOLERA or not, which was at present in London.

Dr. Whyte then informed the society that Mr. Searle had seen the disease in the Borough, and that he had told him (Dr. Whyte) that it was exactly similar to the disease he saw at Warsaw, and very nearly resembled the cholera of India. In consequence of the debates of the London Medical Society, Dr. Whyte had been induced to commit to paper his thoughts about the disease, which he would read. [There was at this instant a great—what shall we call it, uproar—several speaking at once. At last, Dr. Ferguson maintained that he (Dr. W.) should be heard; and proposed that he be allowed to read his paper.

The uproar again commenced, some members being desirous that the Borough Practitioners should address them; others that Dr. Whyte should read his paper, when

Mr. King arose, and said he believed he could conciliate all parties. (*Laughter, and some sneers.*) He commenced by alluding to Dr. Webster's cases, and cited a case of aphonia, which was mistaken for cholera, and frightened away all the patient's relatives, and caused so much fear, that boys in the street, when they had occasion to pass the house where the patient lay, ran quickly by it, and dreaded it, as a house containing a pestilential disorder. Mr. King proceeded to state that he had made investigations, and had driven through many dirty streets to ascertain whether there was any such disease in the Borough. He had seen a case, the patient's name was Ann Daly; she lives in a close, confined, ill-ventilated apartment; is of a robust constitution, and a ruddy-faced individual.

The President here interrupted Mr. King, as he was desirous of learning of the society in what order the debate should proceed; whether Dr. Whyte should read his paper, or Mr. King should proceed?

Mr. King observed that he was just going to put the very question. (*Laughter.*)

Dr. Copland rose to order.

Mr. King said he would not be put down by any man but the President.

The President immediately rose, and requested Mr. King to sit down.

Mr. King, however, remained standing, when

Dr. Gilchrest said I appeal to Mr. King's delicacy, and request him not to persist in denying the identity of the disease with Continental cholera, when Dr. Clark had declared it to be such.

Mr. King remarked that after the fatigue he had undergone in the Borough, he hoped the society would be indulgent to him, more especially as he felt considerable anxiety in

regard to the dangerous consequences to be apprehended from the report throughout England. (*Cheers*). He believed that the symptoms of the Asiatic cholera were—cramps, blueness of the skin, rice water evacuations, and extreme cold; in the case of Ann Daly, the symptoms were materially different; he found her at the water closet; he was wrong, she was on the pot, and as the pot was there, he examined at once the nature of the evacuations; instead of the rice water he had been led to expect, the matters passed were thick and stercoraceous. She had tenderness of the abdomen on pressure, the tongue covered with a brown coat, the pulse at seventy; in fact all the symptoms of the gastro-enterite, or the English cholera. He asked himself if this was a new disease?—If such a case as this was sufficient to warrant the Board of Health in classing it as a case of cholera? Mr. King then proceeded to make some strong and well-merited remarks on the case, and denounced the Board of Health in no measured terms, for being the cause of statements going forth to the effect that there was a pestilential disorder in England, and thus ruining the commerce, and on such grounds as these. (*Applause*). When he endeavoured to ascertain whether there were any other cases, he was told that this was the most remarkable case, the case in which the symptoms most closely resembled the cholera. Mr. King then proceeded to give the definition of a pestilential disorder; and he conceived that it was only a pestilential disorder when the deaths ranged far above common: now, if we take cholera at its acmè, we shall find the deaths to be little, if any thing, above the average range for a certain number of years immediately preceding. He then proceeded to make some strong remarks on the Cholera Bill at present in progress through the House, and declared positively that there was no Asiatic cholera in London; he likewise censured severely the Central Board of Health, for creating and keeping up the panic: he did not object to medical men being paid; he was of opinion that medical men were generally paid too little, of which he had personal experience. (*Laughter*). Mr. King then remarked that the great man, who had previously attended the meetings very regularly, until his appointment to the Central Board, had not been once since.

Dr. Fergusson called Mr. King to order; personalities should be avoided.

Mr. King said that he was far from being personal. (*Great disorder; cries of "chair."*) After a time, Mr. King continued his oration, and passed a great eulogy on Dr. Johnson. Mr. K. then moved that a resolution be passed to the effect that the Westminster Medical Society considered that Government had been deceived, and that no new or pestilential disease existed in London.

Mr. Chinnock begged to rise to order; the society cannot come to a specific determination

on such a subject, and he trusted that Mr. King would withdraw his motion. (*Hear, hear*).

Dr. Sigmond rose, not with the intention of seconding Mr. King's motion, but to express his concurrence with his remarks on the Central Board. He expressed himself as extremely indignant at their want of urbanity. He had requested opportunities of seeing the disease, and was informed by the Board that the patients died so soon, it was impossible to give notice of any case. (*Hear, hear, loud laughter*). The Dr. however, highly desirous of seeing the disease, had gone to the Borough, and had met with nothing but the greatest civility from the medical men. He saw some cases which were decidedly not the Asiatic cholera, if at least he might judge from what he had read. The only case of blue cholera, which he saw, was that of a man in a place dignified by the name of the Cholera Hospital; the only part blue was on the arm, where the man's name was tattooed in blue. (*Laughter*). In another case that was pointed out to him, the symptoms were pain and spasm in the abdomen, with a yellow skin, in fact, rather a case of icterus, dependant on gall-stones, than a case of cholera. Dr. Sigmond had very strong doubts, for he supposed he must not express himself more strongly, of the existence of cholera in the metropolis.

The calls were now reiterated for Dr. Whiting, and for Dr. Whyte, but the partisans of Dr. Whiting finally conquered.

Dr. Whiting then stated, that he had had no intention of speaking, but he was obliged to do so, in consequence of what had fallen from the two last speakers: he must inform those gentlemen, that for the last three or four days, there had been no severe cases; when the cases were first seen, they were terribly formidable. The Doctor declared that it was a disease he had never before witnessed, and if it had ever before shewn itself, Dr. W. thought that in his extensive practice he must have seen it. No one who had ever seen the disease in the North of Europe, or in the North of England, had denied its identity with the malady at present in Southwark.

Drs. Blicke and Whyte both rose at once; it being decided, that Dr. B. should address the meeting, he observed that he rose to second Mr. King's motion: he did not care for the laws of the society; he was a young member, and he owned that he had not yet read them. He thought it too much of Dr. Whiting, who had only seen two cases, to decide upon its being a new disease, when he had seen it prove exceedingly fatal in India, and he assured the society, that he had seen it in England over and over again. (*Cries of hear, hear, mixed with laughter and sneers.*)

Dr. Somerville opposed the motion.

Dr. Whyte rose, and was about to read his paper, when the cries of motion, chair, read the paper, became so vehement that nothing

could be attended to; for a minute or two all was "confusion worse confounded," and the President had apparently lost all command over the meeting. When silence was in some measure restored, Mr. Chinnock moved an amendment on Mr. King's motion, to the effect that the society do immediately discuss the identity or the non-identity of cholera with the foreign pestilence.

Dr. Fergusson seconded the amendment.

Dr. Whyte again rose, and was about to speak, when Mr. King rose, and said, that he objected to the amendment; Dr. Fergusson said that he could not do so, as he was the proposer of the original motion.

The amendment was then put and carried.

Dr. Whyte rose and said, that in speaking of the identity or non-identity of the disease, he must judge from hear-say, as he had not seen the malady in London, but he had the authority of Mr. Searle, who had seen it, that it was perfectly identical. The Doctor then digressed to the subject of contagion, and said, that as the majority of the society were in favour of its being contagious—(*cries of not by any means, no, no*)—if not the majority of the society, the majority of the speakers were—(*no no*) driven from this strong hold, the Doctor had recourse to the diurnal press, and the consecutive numbers of the *Medical Gazette*; he was proceeding in this manner, baffled in his assertions by the united voice of the members present, when

Dr. Granville rose, and begged to call him to order; the subject for discussion was the identity and not the contagion of cholera.

Dr. Webster stated, that he went in company with Drs. Johnson and Gregory, to see the cholera in the Borough, and visited several of the patients: he most certainly thought the symptoms were not new to him.

Dr. Whiting observed that those gentlemen had not seen the cases at their commencement; and added, that there had been no new cases for the last three days, and the other cases were nearly convalescent, though why he could not tell.

Dr. Webster inquired what had become of the contagion, as the disease had thus stopped? it ought to have gone on more rapidly.

Dr. Gilchrest passed an eulogium on the Central Board: he stated that he had visited almost every house between Rotherhithe and Lambeth. (*Hear, hear, indeed!*) He was quite convinced of the perfect identity of the disease. Dr. G. then alluded to the case of Ann Daly, detailed by Mr. King, and said the symptoms were essentially different when first attacked. He likewise added, that the blue appearance was evanescent, disappearing after death; neither was it present in all cases. He objected to the term *Asiatic cholera*, because he neither believed it to be imported nor contagious. If ever it can be contagious, there is every contingency to favour its action now in the dirty hovels which

are thronged by the numbers who go to visit the patients.

A gentleman enquired if Dr. Gilchrest considered cholera to be a new disease?

Dr. Gilchrest replied no—not by any means.

Dr. Epps then proposed that an adjournment should take place until the next night, when he hoped he might be allowed to commence the discussion, and he expected this favour the rather that he had never as yet offered his opinion on this disease.

Dr. Copland and Mr. Varenne both rose and seconded the adjournment, which was finally carried after much useless debate.

The society meet the next evening at the Museum in Great Windmill-street.

There never was a more tumultuous meeting at any time of professional gentlemen: frequently several were speaking at once, and the cries of hear, hear, order, order, chair, read, speak, Dr. this, and Mr. that, were reiterated throughout the evening. It out Heroded Herod.

Review.

A Treatise on the Diseases of the Heart and Great Vessels, comprising a new view of the Physiology of the Heart's Action. By J. HOPE, M.D. Senior Physician to the St. Mary-le-bone Infirmary of London, formerly House Physician and House Surgeon to the Royal Infirmary of Edinburgh, &c. &c.

IN our first number we gave a brief notice of the valuable standard work before us; and, from its vast importance, we now proceed to analyse its contents. It will be found worthy of a place by the side of M. Laennec's imperishable work, in every medical library.

The steady and rapid progress of the medical sciences during the present century, has been in a great measure owing to the minute and systematised researches of the French school of pathologists. Much of their superiority over ourselves may be fairly ascribed to the wisdom of their hospital regulations, which enforce the

universal inspection of the dead, and to the entire emancipation from prejudice on this subject of the popular mind. Favoured by their liberal institutions, by the magnitude of their hospitals, and by their distinct appropriation to specific classes of disease, the Parisian observers have assembled a vast mass of precise and well digested records of symptoms, and especially of concomitant structural lesions. The diseases of the viscera contained in the thoracic cavities, have of late years formed a prominent object of their inquiries; and the new mode of diagnosis by auscultation, is unquestionably the most brilliant discovery in medicine of modern times. As regards the discrimination of morbid changes in the lungs, it will seem to those who are familiar with the great works of Laennec, and of Andral, scarcely possible to approach nearer to absolute certainty. But all stethoscopists are aware, that auscultation was far from furnishing the same precise and trustworthy signs of the diseases of the *Heart*. Laennec, with philosophic frankness, admits this imperfection of the instrument, and his inability to discover through its aid, three important maladies of that organ. We have ourselves, in the course of extensive hospital practice, been frequently baffled in the exploration of the heart; and have so often found our diagnosis falsified by subsequent dissection, that we had ceased to place much confidence in this class of stethoscopic indications. It has, therefore, been with feelings of no common interest, that we have studied the very valuable and novel researches of Dr. Hope, in which we have discovered the key to many of our erroneous judgments, as well as material accessions to general pathological science. Dr. Hope's Treatise is evidently the production of a full mind, which, though profoundly conversant with the literature of medicine, and of course with that of his own

subject, draws mainly from its own resources, and from ample clinical observations. His description of morbid appearances, in their singular accuracy, vividness, and propriety of expression, reveal to us the accomplished draughtsman, upon whose mind the labours of the hand and eye have impressed the most exact and lucid images; and whose "studies" have been selected with judgment from a large assemblage of individual examples, as most eminently typical and characteristic. In fact, we are not aware of any work in the whole compass of English medical literature, which, in the graphic fidelity and distinctness of anatomical description, can be at all compared with that now before us.

We shall have occasion, as we pass consecutively through the several sections of the book, to examine the value of the stethoscopic diagnosis. It may, therefore, be sufficient to remark in general, that besides embodying all that an impartial and discriminating criticism has esteemed sound and trustworthy, in the writings of Laennec and his school, Dr. Hope's work contains much that is entirely novel, and the immediate fruit of his own experimental researches. And to those who are acquainted with the singular diligence of the great French pathologist, and the devoted and concentrated attention which he bestowed for many years, in the wards of a large hospital, upon his new mode of diagnosis, it will furnish sufficient proof of the perseverance and genius of Dr. Hope, to learn that he has detected a fundamental error in Laennec's analysis of the physical signs of the heart's action, and that he has established *his own* interpretation of those signs by the most ingenious and conclusive experiments. We cannot, therefore, hesitate to express our conviction that Dr. Hope's Treatise will form part of the library of every enlightened practitioner and aspiring student;

that it will be associated into a kind of *corpus scriptarum*, with the two splendid monographs of Dr. Abercrombie, on the cavities of the head and abdomen, and that of Dr. Prout on urinary diseases; a coalition which would advantageously supersede most of the voluminous systems, and heavy compendiums, that have been too long the objects of academic study.

Our detailed analysis of Dr. Hope's work, cannot commence more appropriately than with the introduction, which is remarkable for the modesty of its pretensions, and for an enlarged and truly philosophic spirit of inquiry.

"I am anxious to offer my opinions, not as established facts, though I trust that they will be found grounded on careful observation, but simply as propositions to be admitted or rejected according to the test of general experience. I am satisfied that, in our profession more especially, where there are few *fixed* points to constitute the basis of an inductive process, nothing is more difficult to ascertain than a *general* fact. Innovations, therefore, cannot be regarded with too much suspicion, cannot be scrutinized with too much severity, cannot be received with too much caution and reserve."

Dr. Hope proceeds to expose some of the errors of Laennec, but with delicate forbearance and mingled encomium. He expresses his conviction that, with the new explanation of the murmurs and other morbid sounds,

"Not only may organic diseases of the heart be readily and certainly distinguished from nervous and other affections wearing their aspect, but, with attention to certain rules which I have offered respecting the situations where valvular sounds are to be explored, and to certain corroborations derived from general symptoms, the particular valve diseased may in general be detected with precision."

And again,

"We may say that, by the improved means of diagnosis, the maladies under consideration may be recognized, not only in their advanced, but in their incipient stages, and even when so slight as to constitute little more than a tendency."

We confess freely that we have some doubts of the possibility of

"discriminating with ease and certainty," in *all* cases, the structural diseases of the heart, from those which are merely functional. It is admitted by Laennec, in his second edition (tom. II. p. 429,) that the *bruit de soufflet* is often heard in subjects who have no organic disease of the heart; and Dr. Hope's own experiments, performed in conjunction with Dr. Marshall Hall, show that the simple abstraction of blood may give occasion to this and other allied murmurs. The fact, then, that certain unnatural sounds accompany the action of the heart, can of itself throw little light upon the diagnosis. It can only have value when ascertained by repeated exploration to be persistent, and not paroxysmal; and when combined with other general symptoms of less equivocal character, registered in their order of development. We are, indeed, satisfied that it is only as one element of his reasonings, and as subordinate to what have been called the physiological signs, or the indications derived from altered function, that Dr. Hope would receive those sounds, in conducting the complicated mental process of diagnosis, for we have never read a more just and dispassionate estimate of the value of the physical signs, obtained by the ear, in their relation to general symptoms, than is conveyed in the last paragraph of his introduction, which we cannot deny ourselves the pleasure of quoting.

"With respect to the comparative value of the general and physical signs of disease of the heart, it may be said that Laennec rather undervalued the former and over-rated the latter. This was owing principally to the general signs being less perfectly understood, when he studied, than they have subsequently become, in consequence of being investigated with the aid of auscultation. The ardour of his early disciples, who imagined that the physical, rendered the general signs superfluous, brought auscultation into some disrepute by the inaccuracy of their diagnosis. But since the stethoscope has taken its proper place as an auxiliary only, and the diagnosis

has been founded on the two classes of signs conjointly, auscultation has ranked as a discovery that will immortalize its author, and form an epoch in the history of medicine."

The system of classification which our author has adopted, is strongly recommended by convenience and distinctness. There are five leading divisions, embracing I. The anatomy and physiology of the heart. II. Inflammatory affections. III. Organic affections. IV. Nervous, and V. Miscellaneous affections. Cases, and a synoptical table make up a VIth class.

The first part opens with an admirable description, infinitely more detailed and precise than in any preceding writer, of the situation of the heart, and of the relation of its several cavities and the origins of the great vessels, to fixed points on the external surface of the thoracic walls. These landmarks, obtained by forcing needles through the chest into the heart, cannot but contribute to make the diagnosis more exact, and the stethoscopist more vigilant. Percussion, especially on the plessimeter, may we think, convey very accurate notions. Dr. Hope has, in p. 8, very beautifully explained the principle of this instrument.

Chap. II. contains the striking and most original experiments upon which Dr. Hope's great discovery in auscultation reposes. Its importance and novelty claim from us a more minute notice than our limits will permit us to bestow on other sections of the work. Laennec, in both editions of his "*Traite de l'Auscultation*," had announced two distinct sounds for each arterial pulse; the first, synchronous, or nearly so, with that of the pulse, evidently referable to the systole of the ventricles, and immediately followed by a louder sound, which he ascribed to the contraction of the auricles. Now all anatomists, from Harvey downwards, who have described the order of succession, observed in the contractions of these

cavities, explicitly state that the systole of the auricles *precedes*, not follows, that of the ventricles. Professor Turner, of Edinburgh, seems to have been the first to point out the inconsistency of the rhythm or succession adopted by Laennec, from the information of the ear, from that flowing from the surer testimony of sight—"oculis subjecta fidelibus." But Dr. Hope has both re-established the accuracy of the older observations, and has demonstrated, by repeated experiments, the real source of the second sound. To one of these we may refer as a type of the rest,—Exp. II. p. 25. It is thus established, as clearly as any position in physiology, that

"The *first sound* is caused by the systole of the ventricles. The *second sound* is occasioned by the diastole of the ventricles.

Of the Rhythm.

Order of succession—

1. The auricular systole. 2. The ventricular systole, the impulse, and the pulse.
3. The ventricular diastole. 4. The interval of ventricular repose, towards the termination of which the auricular systole takes place.

Duration.

This is the same as indicated by Laennec, viz. the ventricular systole occupies half the time, or thereabout, of a whole beat. The ventricular diastole occupies one-fourth, or at most one-third. The interval of repose occupies one-fourth, or rather less. The auricular systole occupies a portion of the interval of repose.

The experiments were witnessed by many of the most eminent physicians and lecturers of the metropolitan schools, and were so frequently repeated, with various modifications, as to banish all possibility of error. We have no hesitation in pronouncing this analysis of the natural sounds of the heart, to be the only great accession which the science of auscultation has received since the death of its ever memorable author.

Dr. Hope proceeds to furnish what Laennec had not attempted—an explanation of the mode in which the

natural sounds of the heart are generated; (vide pp. 48 and 49). From the healthy, he advances in natural sequence to the morbid murmurs, and is especially minute on those sounds which are occasioned by valvular disease; (vide pp. 56, 57, 58, 59). Dr. Hope combats, and we think most successfully, Laennec's doctrine of the *bruit de soufflet* having its origin in a real spasmodic contraction of the heart, or of the circular fibres composing the middle coat of arteries. Indeed, the simple fact urged by our author, that this murmur is heard in arteries during their diastole, and not during their systole, seems a sufficient answer to the elaborate reasonings of Laennec, who attempts to establish a parallel between these sounds and those observed by Dr. Wollaston, to accompany muscular contraction.

"Both by experimental and pathological evidence, I am led to believe that the murmurs and tremors, as well in the heart as in the arteries, are occasioned by modifications in the motions of the fluid. To establish this point it is necessary to prove, 1. that liquids permeating tubes, do occasion sound; 2. that modifications calculated to elicit the sounds, do take place under the circumstances in which the sounds occur. 3. That the explanation applies equally, whatever be the circumstances under which the sounds occur.

"1. That a bellows sound is produced by the transmission of a fluid, without any intermixture of air, through a tube, though questioned by some, is a fact too easy of demonstration to require discussion. Having just returned from a repetition of the experiment, —one which I have frequently performed, I find the rushing murmur so distinct and close to the ear, as to preclude the idea of a fallacy from the movement of a piston or any other cause: I find the sound to vary in intensity according to the velocity with which the fluid is propelled, to be increased by bending the tube at an angle, and to be still further increased, but also modified, by the admission of air; becoming of a rattling nature, totally different from any sound heard in the heart or arteries."

Dr. Hope describes some curious experiments which he made with Dr. Marshall Hall, on the effects of loss of blood. One of these effects was,

the production or several varieties of the bellows murmur.

"From these experiments it may be concluded that the murmurs and tremors are dependent on the spasmodic abruptness of the heart's contraction, or, more rigidly speaking, on the velocity with which the blood is propelled in consequence of that abruptness: a velocity which implies an augmentation of friction, and consequently of arterial vibration. That an increase of velocity alone suffices to excite the phenomena, independent of an increase of *real* force of the heart's contraction, is proved by their existing when the pulse is small and weak, provided it was jerking or sharp. I conceive the primary cause to reside in the heart and not in the arteries, because the action of the latter was always in exact proportion to that of the former."

In concluding our notice of the first part of Dr. Hope's treatise, we may observe that it is constructed entirely of novel and most important matter, obtained either by direct physiological experiments, or by patient clinical investigation. The various sounds, normal as well as abnormal, which are perceived through the medium of the stethoscope, are described with lucid precision, and traced by a most philosophical analysis to elementary conditions of structure and motion, of which they are the symbols and sensible expressions. Dr. Hope has here availed himself with skill and judgment of the principles and laws of the sciences of acoustics and hydraulics, limiting their application to the purely physical phenomena of the heart's action, and never attempting to bring within their compass, those which have their cause in vital forces and affinities. He has thus laid a solid basement of general facts and established propositions, from which the specific and differential diagnoses of the several morbid conditions of the heart and its investing membranes, will flow as natural corollaries.

(To be continued).

The Working Man's Companion.—The Physician. 1. *The Cholera, published under the Superintendence of the Society for the Diffusion of Useful Knowledge.* Knight, London, 1832.

THE object of this little tract is to explain to the humblest classes the nature of the disease, called cholera, the history of its progress, symptoms, and the methods to be attempted for either warding it off or moderating its power. An introduction of some forty small pages, accompanied by a few anatomical plates, initiates the reader into the mysteries of the conformation and functions of man. The language is clear, the illustrations familiar, and the subject most properly chosen, as one of elucidation at the present time; and on the whole we regard so seasonable a production as this highly creditable to the talents of Dr. Conolly, late Professor of the London University, to whom this work, we believe, is with justice ascribed.

Hints on the Constitution of Dispensaries, &c. By J. STORER, M.D. &c. Consulting Physician to the General Hospital near Nottingham. Hatchard and Co. London, 1832.

THE medical profession in general, but the junior branches of it in particular, owe a deep debt of gratitude to Dr. Storer, for this very valuable, and as we are sure it will prove, very useful publication. In a very brief space the author explains his views of the necessity there is for an improvement in the existing constitution of dispensaries in general, and proposes such modifications as appear to us to be extremely desirable. In the certainty that our medical readers will each peruse this work for themselves, we abstain from entering into its details; but will merely add that the

recommendations of Dr. Storer carry with them the authority of long and extensive experience, he having recently given up a practice which he had begun in Nottingham in 1781.

Elements of Chemistry. Part 1.—Murray. London, 1832.

A FAMILIAR explanation, which requires no previous knowledge of the subject, in order to understand it, of the laws of chemistry, form the subject of this next volume. Illustrations innumerable are to be found in its pages, and it is a book that is well calculated for those who desire to be acquainted with some of the most curious of the phenomena of inorganic nature

Journal of a Tour through Styria, Carniola, and Italy. By I. I. TOBIN, M.D. Orr, London, 1832.

THE chief interest of these travels is derived from the circumstance that Dr. Tobin's tour was performed in company with the late Sir Humphrey Davy. The reader will find it an amusing and well written work, and he cannot, without a great deal of interest, read the account of the declining year of such a man as Davy,

Practical Observations on the new System of Warming Dwelling Houses, Cathedrals, &c. By N. W. DEWHURST. London, 1832.

THIS is a very valuable, though a very economical book of advice, upon a most interesting point of public and domestic convenience. Mr. Dewhurst contends that the employment of hot air, for the purpose of raising the temperature of public edifices or

private houses, produces not only uncertain, but sometimes very dangerous effects, and it is his object to shew that to substitute hot water as the source of heating buildings is on every account more desirable.

Lecture on Cholera, delivered before a Meeting of the Medical Profession of Liverpool. By D. BAIRD, M.D. Liverpool, Rockliff and Duckworth.

DR. BAIRD gives in this lecture an account of his mission from Liverpool to Newcastle, when the cholera first broke out. He takes a very rational view of the disease, and states some important facts, which may be very usefully referred to by the profession.

A Series of Experiments performed for the purpose of showing that Arteries may be obliterated without Ligature, Compression, or the Knife. By BENJAMIN PHILLIPS. London, Longman, 1832.

THE results of a great number of experiments on the lower animals are here detailed, with the conclusions drawn from them. Mr. Phillips states that he has established that arteries may be obliterated safely and certainly by the introduction of a foreign body, and that this obliteration may be effected without danger, when necessary, by means of needles introduced and retained in the artery according to prescribed rules.

But those experiments are not new, for Velpeau and Amussat have performed them, and have drawn from their proceedings similar inferences as Mr. Phillips. We conclude, therefore, that it is rather the misfortune than the fault of the latter, that he is deprived of the credit of that originality which he claims for himself.

We confess we are not quite pleased with the fulsome panegyric dedica-

tion which Mr. Phillips has addressed to Lord Brougham. To that distinguished statesman we are ever ready to pay the homage which is due to his amazing talents, and great services to the state. We, moreover, are disposed to give great latitude to dedicators of every description, knowing very well the extent of that licence to flatter and cajole the dedicatee, which ancient custom has placed in their hands; but we cannot read, without a feeling of impatience, such phrases as "promoter of learning"! "professor of the most varied acquirements"!! "controller of senates"!!! "admiration of his country"!!!! These things are very fair in bankrupt authors, and half-starved poets; but they are utterly unworthy of science, and the minds that are fitted for its cultivation.

Medical Society of London.

February 20th, 1832.

DR. BURNE, President, in the chair.

No Asiatic or contagious Cholera in England.

THIS was the fullest and the most respectable meeting of the society which we have seen for a long time. The minutes of the last meeting were read and confirmed.

Mr. Salmon rose to call the attention of the meeting to the incorrect report of its proceedings, which had appeared in the *Times* newspaper of Monday last, and which was calculated to do the society great injury in the eyes of the public. It was stated that twelve grains of calomel were to be given every twelve hours. He was the last Fellow of the society who would object to reports in medical periodicals, but he really considered those in the newspapers extremely prejudicial to the profession. He requested

to know whether any officer of the society had furnished the report to the paper in question.

It was stated that no officer had reported the proceedings. (*Cries of cholera proceeded from different parts of the room.*) when

Mr. Hooper rose and related three well marked cases of that disease, accompanied by the rice water evacuations, coldness of the tongue, skin, and extremities. Two of these had terminated fatally, and one was *in articulo*. He had given brandy, opium, ammonia, camphor, and in one case, had employed venesection with manifest advantage. After the most minute inquiries, he could not discover the slightest ground for considering the disease contagious, that is to say, communicable from one person to another. A physician had seen one of the cases this evening, and denied it was any thing but congestive fever. Dr. Johnson had seen one of the cases, that of a woman, who was now dying of cholera, and declared it to be the disease.

Mr. Evans also had seen some cases of cholera since the last meeting of the society, but could not discover the slightest proof of contagion. Dr. Gilchrest had seen one of his cases.

Dr. Gilchrest said that he had visited all the streets from Limehouse to Chelsea, in which the disease had appeared, and made the minutest inquiries of relatives, but could find no trace of contagion. The poor people were glad to see him, as he had succeeded in removing alarm from their minds, and enabled them to attend on their relations without any apprehension. He begged to remind the meeting, that the Board of Health had excluded the case of Sullivan from their list of cholera, but considered the Sunderland sailor as the first affected, though the cases occurred simultaneously. He was convinced that the epidemic now prevalent was not Asiatic cholera, was not contagious, and was confined to the poor who lived

in unwholesome districts. Mr. Dendy related a case that occurred in Christ's Hospital, which had nearly all the symptoms of the disease, but which he did not consider cholera.

He had procured some of the rice water evacuations, which he submitted to the society. He thought the first question to be decided was, whether there was an epidemic now prevalent, and was it Indian cholera. Dr. Burne inquired whether any gentleman present had tested the rice water evacuation, as some had said it was acid, and some alkaline.

[A phial, containing the fluid, was handed round, when some of its physical properties were ascertained by the smell and taste—it also reddened lithmus paper.]

Mr. Stevens had seen the case with Mr. Dendy, and agreed with that gentleman; he was of opinion that a similar disease prevailed some months ago, and that it was not contagious.

Dr. Shearman thought it should be determined whether there was an epidemic, and did it differ from Asiatic cholera. He thought the disease quite different from common English cholera, and he would ask any gentleman present if he had ever before seen a similar disease in this country?

Mr. Bryant described a case or two of cholera, but in so low a tone as to be inaudible to nine-tenths of the meeting.

Mr. Mitchell went into a long statement of the cases related by the last speaker, and both admitted there was no proof of contagion.

Dr. Sigmond had seen the cases described by Mr. Hooper and Mr. Dendy, and did not consider either as cholera. Both resembled the congestive form of typhus, or the collapse of the cold stage of an intermittent. He bore his testimony in favour of the humanity, judgment, and skill of the medical attendants; but should censure the carelessness of the parish authorities, who had shewn the greatest inattention to the poor. When

he visited the hospital; two men were rolling about on the floor, without bedding, a fire, nurses, or any accommodation. In fact, the parish should have procured constant medical attendance, as every effort should be made for the unfortunate woman, who was now in a dying condition. Too much praise could not be given to medical men, for their zeal and indefatigable attention to the poor affected with cholera, and without any remuneration. The only persons remunerated were those of the Central Board of Health, for disseminating mischief. One of that body (Dr. Barry) had, on one occasion, attended the Westminster Medical Society, where he gave a very poetic description of the disease; but why was it that no member of the Board was present at this meeting—a meeting of some of the most learned and eminent medical men in the country, to explain every point in dispute, and to reply to all questions that might be asked? No, the Board studiously avoided meeting their brethren fully, fairly, and openly; and the inference from such conduct was too manifest to require elucidation. From all that he had read, seen, and heard of the disease, he had arrived at the conclusion that it was not Asiatic cholera, it was not contagious, and had originated in this country.

Mr. Hooper replied with great warmth, and contended that the hospital of which he was the surgeon, was the only one as yet established for cholera patients, and now possessed every necessary. Dr. S. had seen it the first day it was opened, before any thing was procured. He and his assistant were in constant attendance on the poor woman, up to the hour he had come to the society; and now she had every care: there were tins of warm water placed along the trunk and extremities, warm blankets, two nurses, and every thing that could be found in any hospital in town.

Dr. Johnson was loudly called for, and rose in compliance with the wishes of the meeting. He said he had seen the case mentioned by Mr. Hooper, and bore his testimony to the truth of every thing stated by that gentleman. He considered the case one of cholera.

He had seen the cholera in India, and the disease now prevalent was totally unlike it. It was not contagious, but endemic, and arose from certain conditions of the atmosphere, and certain emanations from the earth. It closely resembled the epidemic cholera, of 1669, described by Sydenham, and other epidemics, noticed by Morton, and several of the earlier British writers. The present epidemic was not contagious—there was not a shadow of proof in support of such an opinion. The contagionists had done the greatest mischief to the trade, commerce, and the millions dependant for their bread on these sources. The refusal of the man brought from Hoxton, at Bartholomew's Hospital, and his being bled in a hackney coach, at the Surrey Dispensary, illustrated this assertion, and it ought to be recollected, that this poor man got an asylum in Mr. Hooper's hospital, and was now convalescent. Such was the effect of the abominable notion of contagion.

The present disease was not new in London; he, Dr. Johnson, had seen as violent a case as any lately recorded, in the person of a taylor, who fell down in the street, several months ago, and was taken to Marlborough Police Office. The guardsman Webb, had also had the worst form of the disease, and recovered; but this was denied by the Central Board of Health.

Dr. Grimstone, of Worthing, had been introduced to the Board, and was received very coolly; a letter was read from that gentleman, stating that the prevailing disease was not the cholera of India.

This was the most animated dis-

cussion that has as yet taken place in the metropolis. The unanimous opinion of this numerous and highly respectable meeting was, that cholera is not the Indian disease, and is not contagious. All denounced, in the strongest manner, the conduct of the Central Board of Health.

THE

London Medical & Surgical Journal.

London, Saturday, Feb. 25, 1832.

NO ASIATIC CHOLERA IN ENGLAND.
TRIUMPH OF TRUTH.

IN our last Number we fearlessly declared our fullest conviction, that the prevailing epidemic was not Asiatic cholera, was not contagious, would be confined to the distressed poor residing in unwholesome districts, and would scarcely attack the affluent who reside in healthy situations. We cautioned the alarmists, "that the disease may not do great mischief, and may suddenly disappear, as it has done elsewhere, when the public mind is most alarmed about it."

Such were our opinions after the most mature consideration of all that had been recently published on the disease; and after ample observation on its symptoms in numerous cases which had fallen under our care since autumn. The *Lancet* and the *Medical Gazette* appeared simultaneously with

this Journal, and both sounded the alarm — contagion, contagion, and nothing but contagion. The one is the organ of a party, the other has taken an erroneous view of the case, so that neither can be depended upon as the faithful and honest guide to the profession or the public on the subject of cholera. We are perfectly independant of all parties in the profession, and nothing but the promotion of the interests of truth, of humanity, and medical science, can, or ever shall, influence us. We worship not at the temple of the Central Board of Health—we seek not its patronage—we are free from self-interest—we look to no appointment or engagement under the auspices of that body.

Hence we are uninfluenced by it; and we have no hesitation to denounce its equivocal conduct and its baneful effects upon the Government, which led to the quarantine regulations, the inquisitorial and unconstitutional Anti-cholera Bill, and the infliction of the deepest distress upon the millions of the humbler classes of society. We accused this Board of inducing a good Government to claim a penal statute, and to tax and harass the people without real necessity. We called upon our contemporaries of the public press to aid us in exposing the incompetency of this imbecile Board; and the conductors of the press have answered our call, and have almost unanimously afforded their co-operation in diffusing our principles, to the utter confusion

and dismay of the alarmists and contagionists. Long may the glorious press, the sacred source of all those happy influences by which the social condition of man has been ameliorated, elevated, and dignified, continue in the plenitude of its power. To the Editors of the *Times*, *Herald*, *Post*, *Courier*, *Globe*, *Chronicle*, *Sun*, *Weekly Dispatch*, *John Bull*, *Albion*, &c. &c. we offer our best acknowledgments for their promotion of the public interests. Our remarks, which were fully quoted by the above able and distinguished writers, were published on Friday; the *Lancet* and *Gazette* followed, both proclaiming Asiatic cholera and contagion, in the words of the Board of Health; the Westminster Medical Society met on Saturday, and the London Medical on Monday; when lo! all the eminent members of these learned and scientific bodies were of our opinion, as appears by the reports of these institutions, published in another part of this Journal; and the unfortunate Board of Health was consigned to that obloquy and disgrace, which its terrific and groundless proclamations so eminently merited. It must be broken up, as we suggested last week; we must have a Board in which confidence can be placed. The following are a few of the happy fruits of the contagion of this sapient body:—

BOARD OF HEALTH PLACARDS.

ON Thursday week the following notice, issued by the Central Board

of Health, was extensively posted over the Metropolis:—

“CHOLERA DISTRICTS.—Looseness of bowels is the beginning of cholera; thousands of lives may be saved by attending in time to this, a complaint which should on no account be neglected by either old or young. In places where the disease prevails, when cramps in the legs, arms, or belly are felt, with looseness or sickness at the stomach, when medical assistance is not at hand, three teaspoonfuls of mustard-powder, in half a pint of warm water, or the same quantity of warm water, with as much common salt as it would melt, should be taken as a vomit, and after the stomach has been cleared out with more warm water, 25 drops of laudanum should be taken in a small glass of any agreeable drink. Heated plates or platters, to be applied to the belly and pit of the stomach. As persons run considerable risk of being infected by visiting those suffering from this disease in crowded rooms, it is most earnestly recommended that only such a number of persons as are sufficient to take care of the sick be admitted into the room.

“Central Board of Health,
“Council-Office, Whitehall.”

“W. MACLEAN, SEC.

Was any account ever published, better calculated to excite universal alarm, than this? Nevertheless, it was sedulously posted on every corner of the streets, we presume, for the land-

able purpose of exciting terror and pre-disposing his Majesty's lieges to the said malignant and pestilential disease.

Reader, look to our reports of the Medical Societies, and then form your deliberate opinion on the previous document.

Behold—other specimens of the worthy Board.

THE CHOLERA PREVENTION BILL.

THE Bill for the Prevention, as far as may be possible, of the Disease called the Cholera, or Spasmodic or Indian Cholera, in England, enact as follows:—

I.—The Lord President of Council, &c. to have power to issue orders at any time to prevent the spreading of Cholera,

II.—Orders to be certified by a Clerk of the Privy Council, and received as evidence.

III.—Penalty for violation of orders.

IV.—Recovery of penalties before any two Justices of the Peace.

V.—Proceedings in case of information. Persons making default to be committed to prison.

VI. and VII.—Justices may levy penalties, to be applied to the relief of the poor of the parish.

VIII.—Justices are empowered to order payment of money for purposes of this Act.

IX.—One person in the Privy Council Office may send letters and packets from London, free from duty,

during such time only as this Act shall continue in operation.

X.—The Orders of Council to be laid before Parliament.

Measures taken by the French Government, in consequence of the appearance of the Cholera Morbus in London.

ORDERS have been transmitted by the Minister of Commerce and Public Works, directing that all vessels coming from the Thames, shall be subject to a quarantine observation for five days.

The Port has been closed, because eighteen fatal cases of cholera have occurred in London, the inhabitants being about 1,500,000.

The general impression on the public mind, and, indeed, throughout the medical profession is, that the following placard is extremely felicitous, and applies to every parish in the metropolis:—

“*Cholera Humbug!*—Inhabitants of Lambeth, be not imposed upon by the villanously false report that the Asiatic cholera has reached London. A set of half-starved doctors, apothecaries' clerks, and jobbers in parish funds, have endeavoured to frighten the nation into a lavish expenditure; with the Government they have succeeded in carrying a bill, which will afford fine pickings. A ruinous system of taxation, starvation, and intemperance has been long carried on; it has now arrived at its acmé, and disease is the natural result.”

An able writer in the *Herald*, of Tuesday, calls upon some honest member of Parliament to move for an account of the fees paid to the members of the Board of Health; and the exact expense incurred by Government for the prevention of Indian cholera in England. Had not the honourable member for Middlesex been affected with cholera-phobia, we should look to him as the independent and uncompromising scrutator of Government extravagance on this occasion—

But, alas! "Othello's occupation's gone."

Mr. Dixon, M. P. has since moved for these returns.

We have maintained all along that there was no Indian cholera in any part of this country, and those who were of an opposite opinion were duped into it, like the first Board of Health, or were interested in supporting it, like the present Board. Had the members of either been well versed in the medical literature of this country, they could never have blundered on as they have done. Let us refer to the works of Sydenham:

"This disease (cholera) was more epidemic in the year 1669, than I ever remember to have known it in any other, and is easily known by the following signs:—immoderate vomiting, and a discharge of *vitiated humours*, by stool with great difficulty and pain, violent pain and distention of the abdomen and intestines, heartburn, thirst, quick pulse, heat and

anxiety, and frequently a small and irregular pulse, great nausea, and sometimes colliquative sweats, contraction of the limbs, fainting, coldness of the extremities, and other like symptoms, which greatly terrify the attendants, and often destroy the patient in twenty-four hours." "For the most part," says the translator of Sydenham's Works, Dr. Swan, "it proves mortal; no distemper, except perhaps the plague, and pestilential fevers, being so suddenly destructive as the cholera, especially when it attacks children, aged persons, or those who have been weakened by long illness." "Sometimes," says the author of the article Medicine, in the *Encyclopædia Britannica*, "the patients fall into universal convulsions, and sometimes they are affected with violent spasms in different parts of the body. There is great thirst, a small unequal pulse, cold sweats, fainting, coldness of the extremities, hiccough, and death frequently ensues in twenty-four hours." The rapid fatality of cholera at Clapham, in 1830, is a farther proof of the accuracy of the above quotations.

Dr. Mackintosh relates a case of English cholera, that proved fatal within twelve hours. In Dr. Sydenham's description of the disease, we have all the symptoms of the prevailing epidemic, except the lividity of the skin, which occurs at the approach of death from ordinary disorders. Under the term *vitiated humours* by the bowels, the rice water evacuations

are fairly included. The English Hippocrates did not mention bilious evacuations, though he had often named these in his writings. The inference from all the preceding statements is manifest to all honest men, that the epidemic, or rather endemic, cholera now prevalent, is not a new disease, and is certainly not to be attributed to foreign origin. This conclusion is incontrovertible; but it does not warrant the Government or the public to lose all sight of certain precautionary measures. The grand objects should be, to enforce cleanliness in filthy districts, to improve the condition of the poor, to supply them with better food, drink, clothing, fuel; and by these means to render them, in a great measure, insusceptible of the influence of an unnatural constitution of the weather; and of all things, to remove that universal, though groundless alarm, as to the existence of a contagious disease in the country, which is best calculated to predispose the timorous and weak minded to any epidemic that might prevail. These beneficial objects are not to be obtained by placarding the streets with cautions against a contagious disease, or by closing up the churches, public institutions, schools, theatres, &c. or by preventing the people from pursuing their ordinary avocations, and observing their social relations.

Let the lower classes be better fed and clothed; let their condition be ameliorated and improved, and the cholera will soon disappear. We

fully agree with Dr. Tweedie, that "the best mode of prevention is serenity of mind, personal and domestic cleanliness, warm clothing, and wholesome food. If parochial authorities and Local Boards of Health attend to these hints, they will do more to ward off the cholera, than by the most rigorous system of excluded intercourse."

Dr. Uwins has also concurred in our view of the disease:—"It has always been my opinion that we have *new disease* in this country; and if there have been an increase in the number and malignancy of the old one (as assuredly there has been) it is to be ascribed to a particular condition of the atmosphere, and to the representations and reports of alarmists. I can say that many cases have occurred to my observation within the last six months, which, had they happened in Sunderland, would have been recorded as cases of Asiatic cholera, and the occurrence of which in so large a number appears to me only explicable upon the principles just referred to. I do not say that the epidemic may not be still more violent and malignant than it has hitherto been; but I must see and hear much more than I hitherto have, before I am convinced that there is any thing further to be feared than from epidemic constitutions of the atmosphere generally, which now produce one kind, now another, of pestilential malady."

Professor Davis, Dr. Copland, Dr.

Johnson, Dr. Conquest, Dr. Sigmond, and many others, entertain similar opinions to our own, which want of space prevents us from presenting in detail. We are also happy to observe that Dr. Johnson and Dr. King have succeeded in establishing an association of medical men, who believe there is an epidemic disease now prevalent in this kingdom, but totally different from Asiatic cholera. Nine-tenths of the profession are of this opinion. These, in accordance with the humane and truly benevolent character which ever distinguished the faculty, render incessantly the most valuable assistance to the poor, expose themselves in scenes the most appalling and distressing that can be conceived, and without the slightest prospect of remuneration. At all hours, at the sacrifice of personal comfort and interest, the medical practitioners are attendant on those affected with cholera. There is no class of society so well acquainted with the privations and sufferings of the poor, or which more deeply sympathize with the afflicted. The medical man is the friend of the forlorn and deserted, the cheerer of the despondent, the solacer of the broken hearted, and he is found wherever the prevailing and frightful disease exists. When the hopes of life no longer remain, he calms the tumultuous grief of relatives: he soothes the anguish of those departing from this life, and recalls their thoughts to that better world, where sorrow will be no more.

In the present ill-founded alarm of a contagious disease, which has spread dismay throughout the people, and sundered the ties of natural affection, the medical practitioner, unmoved by such example, unawed by terror, regardless of himself, discharges every social duty—he becomes the father, the brother, the husband, and the friend of the destitute; his unwearied attention “smooths the pillow of the dying; he inspires the desolate with hope, and wherever he goes, he is the dispenser of good.” Justice commands us to exhibit a fair representation of the profession at the present period; and to shew, that while we censure a few, we must applaud the virtues of an overwhelming majority.

An act of flagrant injustice has been inflicted by the Central Board, of Health, and its Cholera Gazette, No. 3, Feb. 14, on the professional competency of Mr. Bowie, who reported the case of Daniel Barber, a seaman, belonging to the ship *Felicity*. The man presented all the symptoms of cholera, according to the nosology of the Board; the practice employed was advised by the Board; and the reputation of the practitioner is assailed, the case denied to be cholera, and the history of the symptoms and autopsy grossly misrepresented. We shall publish the facts in our next.

MR. EARLE'S LECTURES.

WE regret to learn that some inaccuracies have crept into our reports of Mr. Earle's lectures, but which shall

not happen in future. The gentleman who took them down has been engaged for years on the press, and was recommended to us in the highest terms. We have, however, made such an arrangement as precludes the possibility of misapprehension hereafter. It would be extremely painful to us to circulate any statement in this journal prejudicial to the professional reputation of the youngest of our contemporaries, and much more so of a gentleman who deservedly stands so high as Mr. Earle. It is contrary to our disposition, feelings, and wishes, to insert a single sentence calculated to detract from the reputation of any member of the profession. We are no partisans, we disclaim all personal partialities—all predilections, of whatever sort—all feelings of hatred or of malice, or of favour or affection, which might induce us to depart from that plain and straight-forward path which is pointed out by justice, and duty, and conscience.

SIR HENRY HALFORD.

THE *Spectator* has inserted two fabricated letters, ascribed to this distinguished physician, and a weekly contemporary has also been imposed upon. It is but justice to inform the profession that Sir Henry has publicly disavowed these letters, and solemnly declared that he never wrote a line to either of the Noblemen alluded to, on the question of Reform. We are happy to notice this avowal, as it would be extremely unprofessional, as well as ungentlemanly, in the President of the Royal College of Physicians, to act such an undignified and despicable part.

REMARKS ON CHOLERA.

To the Editors of the Medical and Surgical Journal.

AMONG the various remedies suggested for the cure of cholera, I do

not remember one that is aimed with sufficient precision at restoring the function of the kidneys. The total suspension of this function seems to be the grand peculiarity of the disease; and its restoration ought to form, in my opinion, a more decided object in the treatment.

It would, probably, well repay the medical philosopher to inquire how far the symptoms of typhus, yellow-fever, plague, &c. depend on the retention in the blood of matters that ought to be passed off by the organs of secretion: it could not prove a barren subject.

If we conceive that each secreting organ, when in health, consumes a given quantum of the nervous fluid (whatever it may be), it would be well to inquire what are the results when, in disease, that quantity is reflected back from each organ, into the system. That which ought to be consumed by the uterine secretion, when reflected from the uterus, causes, sometimes, profuse biliary secretion, or green sickness; in other cases globus hystericus, in other hysterical convulsions. May not that which is reflected from the kidneys in cholera, cause the spasms peculiar to the disease? And if this be the case, would not the spasms be best relieved by restoring the function of the kidneys?

When the kidneys of a dog are extirpated,* the nervous fluid which

* Mayo's Outline of Human Physiology, 1st edit. page 94.—“M.M. Prevost and Dumas found that by the removal of a single kidney from a cat or dog, little effect is produced upon the health; but, that within three days after the removal of the second, copious liquid brown evacuations take place, with vomiting of the same matter, rapid, small pulse, great constitutional irritation, and laboured breathing: the animal dies between the fifth and ninth day.” Magendie's Elementary Compendium of Physiology, translated by Dr. Milligan, 2nd edit. page 466:—“Extraction of one kidney from a dog does not impair the health of the animal; it merely appears that the secretion of urine is aug-

ought to be disposed of in him by the urinary organs, seems to be reflected upon his liver, causing a very profuse biliary secretion, which seems, in his case, to supersede the spasms peculiar to cholera. The serous part of the dog's sanguineous mass, that ought to form urine, seems to be thrown off by his intestines, and discharged by profuse watery vomitings, and purgings, like those of cholera patients.

According to this view of the phenomena of cholera, it would seem expedient to restore the kidneys to action as speedily as possible; and also (as being the most useful and efficient outlet of the nervous fluid when reflected from secreting organs), to urge the liver to action.

CÆRULEUS.

CASE OF LUMBAR ABSCESS.

By D. F. NICHOLL, M.R.C.S.

WILLIAM REES, aged 28, a tailor, consulted me on account of a swelling in his back, which had been gradually coming on for several months. When the swelling was first observed, he applied to a quack, who stated it to be a rupture, and advised the patient to wear a truss, which he did for several weeks, during which time the tumour grew larger and larger, and his health also suffered much. When I saw him, he was extremely weak; on examining the back, I found the swelling was an abscess, occupying the whole of the left lumbar region, and extending up the back beneath the scapula; there was not any swelling in the groin. From this I

concluded the matter had not followed the course of the psoæ muscles. I made an opening, about an inch and a half long, in the most depending part, with a common abscess lancet, not valvular, as recommended by Mr. Abernethy, and an enormous quantity of purulent matter, at least a gallon and a half, escaped. After evacuating the contents of the tumour as much as I was then able, I injected a solution of the sulphate of copper, in the proportion of ʒij. s. c. to ʒviij. of water, and applied a compress (with an aperture in the centre, to allow a free vent to the matter); over which was a roller, which I passed two or three times round the body, taking care that I made pressure on the whole of the parts which had contained the matter. The patient at first appeared a little faint, but was relieved after having taken about ʒj. of compound spirits ammonia in a little water. I ordered him to bed, and to take a glass of spirits and water; this he did during the day and succeeding night; a considerable quantity of matter was discharged, so that in the whole, I dare say, if measured, it would have amounted to at least two gallons. I ordered him the following mixture:—Sulphat quininae, gr. xv. acid sulph. dilut. ʒiss. tinct. card. c. ʒss.; infusi gentian sufficient to make a half pint mixture, of which he was directed to take three table spoonsful three times in twenty-four hours, and a pint or two of porter, and to live generously. This plan was followed up for three months, with occasionally injecting either a solution of the sulphate of copper, or some other stimulant; and also occasionally substituting for the above medicine the compound steel mixture, at the same time attending to his bowels, with evident prospects of the case ultimately doing well, for his general health was considerably improved by this time, and as much of the interior of the cavity as could

mented, and that it is effected with greater rapidity.

"Extraction of the two kidneys infallibly destroys the animal in the space of two, three, four, or five days. I have for a long time observed that in this case the secretion of the bile becomes augmented, in a proportion truly extraordinary, the stomach and the intestines being literally filled with it."

be seen, had a healthy granulating surface. The discharge, which came away daily, at first was considerable, and watery, but in a short time decreased in quantity, and assumed a good character. During this time, the little store he had been enabled to lay by from what he had earned, was nearly exhausted, and finding himself gaining strength, he thought that he would try, on the suggestion of a quack, which, by the way, was not amiss, what effect the air of the sea-side would do for him. This change I consented to, provided he would either consult some surgeon whom he intended going to, or take with him a prescription from me, so that he might have some medicine. The latter he preferred, but it was only a promise, for he took no more medicine. On his road to the sea-side, he was exposed to rain in an open cart for several hours; this brought on a fever, which, however, he got the better of, and remained there a month or so, gradually getting worse. At length he returned home, at which time he could scarcely move without assistance. I did not see him again, and in a short time he died.

Hospital Reports.

ST. BARTHOLOMEW'S HOSPITAL.

Aneurism from Venesection.

THE case to which Professor Cooper, in his lecture in the present number, alluded as having occurred at St. Bartholomew's Hospital (p. 97), was that of William Desby, a tall, stout, and apparently healthy man of thirty-five years of age, who was admitted into this hospital on the 12th July, 1831, on account of a varicose aneurism at the bend of the right arm.

This man had a short time before been bled at Margate for a pain in the chest; and it is a curious circumstance, that the very same week, and we really believe the very same day,

a lad aged about eighteen years, applied to the hospital on account of an aneurism in the same situation, and caused by the self same operator! Our medical readers will hear with satisfaction that the unhappy artist, on whose conscience the burden of two such crimes as these has lain, belongs to no legalized department of our profession.

In Desby's case nothing material occurred after the wound of the artery, and no secondary hemorrhage took place. The tumour, when he was admitted, was at the bend of the arm towards its inner side: it was soft, elastic, and of the size of a walnut; and the skin, which retained its natural colour, could be easily made to move over it. The patient complained of no pain or other inconvenience, except a slight difficulty in the movements of the fore-arm. The pulsation was distinctly visible, and that characteristic jar or thrill, which attends cases of this sort, could be easily detected when the ear was brought near the arm. There was no difference of temperature between the two limbs; but the radial pulse of the right was much more feeble than that of the left arm.

A compress was employed over the tumour, which succeeded, in about seven days, in closing the communication between the aneurismal sac and the vein; and consequently converting the varicose aneurism into a circumscribed false aneurism. The jarring or vibrating sound was no longer to be distinguished, and the tumour exhibited no other characters than those of common pulsation, attended with *bruise*ment.

The patient then left the hospital, and returned to the country. On the 11th of August he applied again for admission, the tumour having considerably increased in size. On the 13th Mr. Lawrence tied the brachial artery about three inches above the bend of the arm. On the 16th acute fever seized the patient; he com-

plained of great pain in the chest; there was difficulty of breathing; he had a short dry cough, and he became restless and very much alarmed. Four ample bleedings from the left arm—the application of 130 leeches, two large blisters, and large and repeated doses of calomel, became necessary, in order to abate the violence of the symptoms. The ligature on the artery came away on the eleventh day after the operation. On the 8th of September the patient had been so well as to be able to eat heartily at a feast of roast beef, which the governors of the hospital liberally supplied to all the patients in the institution, in compliment to the event of their Majesties' Coronation.

On the 20th of the same month the patient left the hospital in excellent health and spirits, the tumour being much diminished and very soft.

In the beginning of the present month he visited the hospital, to acknowledge his gratitude for the perfect enjoyment of health, which he had known ever since, and for which he said he was indebted to the great skill and care he had been treated with. The motion of the injured limb was quite as complete as that of the opposite one; but the pulse at the wrist wanted still the strength of that in the left hand.

The other patient alluded to left the hospital, after some ineffectual attempts to change the character of the tumour by pressure.

ST. THOMAS'S HOSPITAL.

Singular Case of Malingering.

THE term "malingering" applies, in hospital language, to that person who for some particular purpose, assumes the symptoms of a disease, with which he is not really affected, and undergoes the treatment, however severe, which may be deemed necessary for his relief. Such frauds are, or rather used to be, very common in the army; in civil hospitals they but seldom occur. In almost all instances, an

explanation of the cause of these stratagems is sooner or later discovered; but in others, no motive whatever, consistent with the feelings or the common convenience of a human being, can by possibility be detected. The case of a young female, at the above hospital, who was admitted a fortnight ago, is a remarkable specimen of the truth.

Eliza Havens, aged 21, of robust habit, was admitted into Mary's ward, under the care of Dr. Elliotson, on the 26th January. She complained of acute pain in the side, with cough and occasional spitting of blood. She stated, that her illness was brought on by two abortions which she experienced, and that her medical attendant *bled her every day for three months*, without any relief. Pressure on the abdomen, she said, gave her pain; she wanted appetite; she had nausea and vomiting; a sensation of weight about the stomach, and her evacuations were only produced by the daily use of medicine. Pulse 120. The account which the patient gave, left a doubt whether it was under hæmoptysis or hæmatemesis she laboured. Venesection to 16oz. 5grs. of calomel, to be followed by 1oz. of castor oil, ordered, with low diet.

28th. Complains of much tenderness on pressure over the abdomen, and cannot endure the pressure of the bed clothes. Twenty leeches were ordered to be applied to the abdomen, to be followed by a poultice of linseed meal. This evening, in consequence of the pain continuing, she was ordered to be bled to a pint, and to take five grains of calomel every four hours.

29th. Her complaints continue the same. Ordered twenty leeches to the abdomen, followed by a linseed meal poultice. This evening she complained of pain about the chest, with great difficulty of breathing. Ordered to take a draught with spi. nit. ʒj. tinct. opii. gutt. iv. mist. camp. ʒi. every third hour.

30th. Has had some spitting of blood of a fluid red colour. Ordered to take some arrow root.

31st. Her disease appears somewhat to be allied to hysteria; she complains of pain on the slightest pressure over the chest and abdomen.

To take a drachm of the carbonate of iron three times a day, and to be put on milk diet.

Feb. 1st. Complains of pain in micturition and sore throat.

Feb. 2nd. The catheter has been passed twice to-day, there being retention of urine, and the spitting of blood returned.

Feb. 3d. The carbonate of iron to be increased to ʒij. three times a day.

Feb. 4th. She complains of pain about the chest, with difficulty of breathing. Bowels confined; a blister ordered to the right side, and an ounce of the *mistura sennæ comp.* as occasion may require.

Feb. 7. The mystery is solved—the artful girl is found with a lancet and a catheter secreted in the bed, and there is no doubt that she employed the former to scarify her gums, in order to produce that bleeding which so much puzzled the faculty. Ashamed of the exposure, she suddenly refused any further treatment, and left the hospital in great dudgeon.

Miscellanies.

Leeches.—We think it necessary to guard the public against the use of a spurious leech, which has lately been introduced in large quantities, in consequence of the high price of the German or genuine leech: the latter is readily distinguished by being dark and spotted on the back and belly, whilst the spurious is spotted on the back only, and yellow on the belly. The use of the spurious leech has, in many instances, produced erysipelas and violent inflammation.

Lithotomy. The dangerous operation of lithotomy was last Friday performed

in the infirmary at Huntingdon, by Mr. Ward, surgeon, in the presence of other gentlemen of the faculty. The patient is a boy, between four and five years of age, his name is Denton, son of poor people living at St. Ives. A stone, about the size of a small walnut, was extracted from the poor little fellow, who bore the painful operation with great fortitude, and is going on well. His mother attends him in the infirmary.

Indian Surgery.—The usual application in India to a fresh wound, is that of slacked lime. A man in our employ was breaking wood, the head of the hatchet came off, and the sharp edge fell with considerable force on the poor creature's foot; he bled profusely and fainted, lime was unsparingly applied to the wound, the foot carefully wrapped up, and the man conveyed to his hut on a charpoy (bedstead) where he was kept quiet without disturbing the wound: at the end of a fortnight he walked about, and in another week returned to his labour.

NOTICE TO CORRESPONDENTS.

WE find it utterly impossible to answer a fourth of our correspondents, but shall give their suggestions due consideration.

3. An apprenticeship to a gentleman, who is not a licentiate of the Apothecaries' Hall, will not be recognised by the Court of Examiners, unless such person was in practice before August 1, 1815. His intention to qualify is not sufficient. It is possible, though improbable, that a letter addressed to the Court of Examiners might induce that body to allow the indenture to be anti-dated, so that our correspondent will not lose his time.

F. L. S. We shall be most happy to adopt his proposal, as we entertain the highest opinion of the attainments and talents of the able Professor to whom he alludes.

In the Press:

Veritas—We are much obliged to our Correspondent, and regret that we cannot insert his friendly communication, which, if published, would be said by the party to whom it alludes to be our own production.

Cholera, a very cheap Pamphlet on the Nature and Treatment of this Disease. By Sir. A. Carlile.

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VOL. I.

University of London.

OBSERVATIONS
ON
DISEASES OF THE VEINS,
PHLEBITIS.

*From the Surgical Lecture, delivered
February 15th, by
PROFESSOR COOPER.*

GENTLEMEN,

THE DISEASES OF VEINS are, in some respects, like those of arteries, but in others differ from them. Thus the morbid state, known by the name of aneurism, is not met with in the veins, which is partly explained by the difference of their texture from that of arteries; and partly by the circumstance of their not being so much exposed to the impetus of the blood.

In the arteries calcareous depositions are very common; in the veins exceedingly rare; and the cause of this fact cannot be altogether referred to difference of texture; for the texture of the pulmonary artery is like that of the aorta, and the right cavities of the heart are organized like those of the left; yet, in the pulmonary artery, and on the right side of the heart, ossifications are far more rarely met with than in the aorta, and in the left cavities of the heart. The veins are more frequently than the arteries blocked up with coagulated blood and organized lymph.

I now shew you, gentlemen, the left iliac vein considerably inflamed and distended, nearly its whole length, with coagulating lymph. Here is the left subclavian vein, the cavity of which is rendered quite impervious by coagulum.

Pus is oftener noticed in them; a fact which Andral ascribes to its being sometimes formed in them, and sometimes conveyed into them by absorption; while the pus in the arteries has only one mode of production, namely, from the vessels themselves, within which it happens to be situated.

Several diseases of veins rather belong to a course of lectures on morbid anatomy, than surgery; and hence I shall make only brief mention of them. The internal coat of veins is sometimes softened, and its texture rendered brittle and pulpy.

The valves, which are duplicatures of the same membrane, are sometimes thickened and opaque; and in other instances perforated, or more or less destroyed, and coagulated blood lodged near, or in the very situation of them. The middle coat is liable to become softened in its texture, in which circumstance, the vein may be burst by very slight causes. This middle coat is also sometimes rendered much thinner than natural; and, in other instances, considerably thickened, and deprived of its transparency, with the longitudinal fibres conspicuous; and the vessel, when examined in this state, remains open like an artery.

While the wounds of large arteries give rise to hæmorrhage, which is often either directly fatal, or which cannot be suppressed without the ligature, those of veins are followed by bleeding, which is of a much more controllable kind. We purposely open considerable veins, in order to take blood from the system; yet, we seldom find that any difficulty occurs in stopping the bleeding, which ceases of itself as soon as the removal of the fillet round the part permits the stream of blood within the vessel to pursue its course to the heart. But, even when venous hæmorrhage is more troublesome, it may always be suppressed by means of moderate pressure, and, I believe, that when a vein is so situated, that it will conveniently admit of compression, a wound of it need never cause much apprehension, as the bleeding may be readily commanded. The right method of suppressing venous hæmorrhage is pressure; and, as tying a large vein is now known to be frequently followed by a dangerous, extensive, and often fatal inflammation of such a vessel, it certainly ought never to be done, except under circumstances which render the other plan inapplicable or ineffectual.

Inflammation of Veins, termed Phlebitis.

The veins are known to be particularly prone to inflammation, which has a great tendency to spread with considerable rapidity along their internal surface, and this so far as to extend from the point where the affection commences, up to the very heart itself, bringing on a train of severe symptoms, and often terminating fatally. However, it may be set down as a principle, that, with respect to the veins, as well as the arteries, a mere redness of them found after death is not a sufficient proof of their having been inflamed, or in any kind of morbid state whatsoever; for such redness may arise simply from their lining having become dyed, as it were, by the red particles, which, after the body has been kept a few days, are more readily imbibed by the lining of a vein, than by the texture of an artery.

The inflammation of a vein is always disposed to extend itself along the vessel in the course of the circulation, but occasionally in the opposite direction also. Sometimes it produces an effusion of coagulating lymph, by which the opposite sides of the vein are united, so as to obliterate the tube; and in this manner a great extent of the tube may be converted into a solid chord.

This preparation, gentlemen, exhibits the coats of the vena saphæna, in one part thickened, and the diameter of the vessel lessened: in another part you see that its canal is totally obstructed. Sometimes one consequence is the secretion of pus into the cavity of the vessel; under these circumstances, the matter is either mixed with the circulating blood; or the inflammation, having produced adhesions of the sides of the vessel, at certain intervals, boundaries are formed to the collections of pus, which then represent a chain of abscesses in the course of the vessel. When the inflammation of veins is not very extensive, its symptoms are the same as those of local inflammation in general; but when it extends into the principal venous trunks, and pus is secreted into them, it is accompanied by a high degree of constitutional disturbance, and by symptoms which are generally compared to those of typhus fever.

The pulse is very quick and small, the respiration hurried, the features are contracted, and the countenance expressive of much anxiety and distress; the tongue is at first white and dry; but afterwards brown; there is thirst, constipation, and frequently nausea and bilious vomiting, and severe pain about the præcordia. The prostration of strength, and the depression of spirits, are extreme. Low delirium generally soon comes on. Death sometimes follows in three or four days, but more commonly, the patient lives a few days longer. The inflamed veins feel hard, and are remarkably painful when pressed upon, or kept in an extended state. The surface of the skin, immediately over

them, is often of a dark red colour, in consequence of the textures around them participating in the affection. Sometimes a vast degree of oedema of the limb occurs, followed by the formation of unhealthy pus, diffused in the cellular membrane, and attended with sloughing of that and other textures. When inflammation is stopped at any point of the interior of a vein, it is remarked, that the line of its boundary is often determined by the entrance of a branch of the vessel, or the junction of two veins together.

Inflammation of a vein is sometimes followed by the sudden appearance of a deposition of pus in some other part of the body, external or internal, and more or less remote from the inflamed vessel. Thus, in inflammation of veins in the arm, it is not unusual to find an abscess form suddenly in the axilla of the opposite side of the body; and, when a vein of the leg inflames after amputation, the patient is often suddenly affected with violent symptoms of disease in the chest, and on examination after death, an abscess will probably be discovered in the substance of the lungs. Sometimes there is a deposition of sero-purulent fluid in the pericardium; sometimes in the pleura; sometimes in the liver, or other abdominal viscera; sometimes in the synovial membranes of the joints.

No doubt these secondary effects of phlebitis, the causes of which have hitherto baffled explanation, are principally concerned in producing death. Whether the deposition of pus in remote parts arise from the passage of the pus from the inflamed vein into the circulation, as is argued by Dr. Breschet, Andral, Arnott, and Cruveilhier; or whether it depend upon the inexplicable sympathies existing between various parts, are questions on which our present stock of information does not enable us to arrive at any positive conclusion. Sympathy is here rather a term of convenience, than of instruction. Phlebitis is mostly occasioned by wounds, as those of venesection, amputation, and other surgical operations and accidental injuries.

A prick of the femoral vein in the operation for popliteal aneurism, may give rise to inflammation and suppuration within that vessel, followed by death. The application of a ligature to the femoral vein, after amputation, may be followed by a fatal inflammation of that vessel, and of the external iliac vein, with traces of diffused inflammation up to the right auricle. It is true, the same consequences sometimes arise from amputation, when the femoral vein is not tied. But, though the wound alone may excite the mischief, a wound and ligature of the vein together, are still more likely to do so; and, on this account, all good practical surgeons make it a rule to abstain, as much as possible, from applying ligatures to veins. Many patients have died of phlebitis, brought on by the ligature of the vena saphæna major for the cure of varicose veins of the leg.

Numerous observations tend to prove, that the peculiar oedematous, painful enlargement of the lower extremity, called *phlegmasia dolens*, sometimes occurring in women, two or three weeks after parturition, frequently depends upon obstruction of the iliac veins, in consequence of inflammation. This fact was clearly established by Dr. Davis, of this University. In several women, who were afflicted with *phlegmasia dolens*, Velpeau found the iliac and femoral veins full of pus; sometimes in women, who die shortly after childbirth, the veins of the uterus, ovaries and the iliac veins, are the only ones containing pus; but, sometimes, besides abscesses in these vessels, there are others in the lungs, spleen, joints, substance of the muscles, and in various cavities lined by a serous membrane.

Gentlemen, the coloured engraving, which I now shew, and which is one of Professor Cruveilhier's, gives a correct view of various circumstances attending phlebitis. The patient from whom it was taken, died of the consequences of that disease, on the 5th day from its origin, after a gun-shot injury of the biceps muscle, received about five weeks before the fatal termination. You will observe, gentlemen, that the cephalic, basilic, cubital, median, and radial veins, and their ramifications, are large, cylindrical, tense and knobby, as if they had been injected. The cellular tissue, connecting them to the adjacent parts, is much thickened, and the vasa vasorum conspicuous. Fig. 2, represents the veins opened; their coats are as thick as those of arteries. The cephalic vein is full of pus, as well as the median and radial veins. On the contrary, the basilic vein exhibits all the stages of phlebitis: thus its lower part contains pus; and its middle a coagulum, in the centre of which is pus; while its upper portion is entirely filled with coagulum. In the substance of the deltoid muscle, you may remark numerous small abscesses; some consisting of veins distended with matter; and others of pus, effused round ruptured veins. A considerable abscess was formed under the deltoid, and the shoulder joint completely full of purulent matter; both quite distinct, and without communication. As the original injury was in the centre of the biceps, this case proves the extension of phlebitis, both upwards and downwards.

With respect to the *treatment of phlebitis*, it cannot be said to be very well understood. In the early stage, leeches may be freely applied over the inflamed vein, in considerable numbers. Owing to the quickness, with which the symptoms assume a typhoid character, venesection is not generally considered advantageous. It may, however, sometimes be tried at the commencement of the case. The limb must be kept in a perfectly quiet state. Purgatives and antimonials may be prescribed, with the view of producing a diaphoresis and diminution of

the force of the circulation. Fomentations relieve the pain very considerably; but, whether they are preferable to cold evaporating lotions, is a question not fully determined.

Some practitioners place their chief dependence upon calomel and opium, with local bleeding and fomentations.

When the vein becomes much distended, and pus is manifestly confined in it, the case should be treated, as a common abscess, the matter discharged by an incision, and a poultice applied. We know, that in such a case, the matter is bounded by the adhesive inflammation in the vessel.

Whatever treatment is chosen, should be actively pursued in the beginning of the disease; for, after the formation of matter in remote organs, and after the commencement of the serious indisposition, attending such collection of pus, the chances of recovery are very slight indeed. The universal derangement of the system is then too great to be rectified again.

King's College.

SELECTIONS

FROM THE

SURGICAL LECTURES,

Delivered

By J. H. GREEN, ESQ. F. R. S.

In the Session 1831—32.

Wounds of the Brain.

GENTLEMEN,

YOU may have with fracture of the cranium wounds of the brain, and though there may be a destruction of the brain in such cases, still they may not be accompanied immediately by symptoms indicative of the nature of such an injury. The membranes of the brain may be torn, and a part of the brain itself lost, and still the functions of the body and mind may go on as usual.

But subsequently, symptoms of compression, or of concussion, will probably arise, or you will have inflammation, and the formation of matter within the cranium; the result of which will be pressure on the brain, and an interruption of the general functions.

In injuries of the brain, likewise, you will have inflammation, the consequence of the penetration into the skull, of a bullet, for instance, of a piece of wood, or of any other foreign body. Sometimes the dura mater only is wounded, and surgeons tell us that the

injury to the dura mater is more dangerous than that of the brain. I believe the remark to be a just one, and it is perfectly true, however paradoxical it may appear, that the less the injury is on the inside of the cranium, the greater the danger. But your surprize at this statement will vanish, when you remember that in wounds of the dura mater simply, the cavity between that membrane and the tunica arachnoida is opened; that the latter covering is exposed to inflammation, and that it is from such circumstances that the increased peril which I shall speak of, arises. In the lecture at our commencement, on the subject of inflammation, you will recollect that I told you that you may arrest the progress of injury to any of the soft parts, by means of what is called the adhesive inflammation, or the permanent restoration of divided or broken parts to one another by a natural process. In the case, however, now spoken of, you will not be able to avail yourselves of the great advantages of this process, since the arachnoid membrane is not susceptible of the adhesive inflammation.

You may have wounds of the brain through all these membranes, by means of instruments—either punctures, incisions, or lacerations. Incised wounds of the brain seldom take place, except in the field of battle, where they may result from sabre cuts. A captain of an East Indianman had on board a carpenter, who was known to be insane. Under some extraordinary delirium, the unfortunate lunatic mounted deck one day, and, coming up to the captain, struck him down with a hatchet. The edge of the weapon passed through the parietal and temporal bones, very deeply into the brain. Notwithstanding the seriousness of the injury, the gentleman recovered, and is still living.—He feels, however, even now, the effects of the injury—his memory is defective, his utterance considerably embarrassed, and he occasionally feels very unpleasant sensations in the head. Gentlemen, your treatment in these cases, must of course be directed to the great purpose of stopping inflammation.

A punctured wound of the brain cannot be regarded in any other light than as an injury of a dangerous character. The sharp pointed instrument, by which it is necessarily made, is likely to penetrate far, and inflammation with suppuration, which will always prove fatal, will be almost sure to occur. In all cases of puncture of the brain, you should therefore make it a point to pronounce a very guarded diagnosis. I am acquainted with the case of a child, who fell forwards on a pair of scissors, the sharp point of which penetrated above, and pierced the orbital plate. Immediately after the accident, nothing scarcely seemed to be the matter, but at the end of a week, inflammation set in, coma, and ultimately death en-

sued; and then only was the cause of extinction of life detected.

Here, gentlemen, is a preparation taken from a very curious case. It belongs to the Museum of St. Thomas's Hospital. A child was playing in a poultry yard; one of the fowls, incensed at some act of the child, struck its beak violently against one of the parietal bones. A very little bleeding followed, and no serious injury was apprehended. In a week, however, pain came on, and finally, undoubted symptoms of compression were manifested. Sir Astley Cooper was sent for—he made an incision down to the bone, and found that matter issued from within. He then trephined, but without any good effect, and the nature of the injury to the brain was distinctly seen after death. There was, in this case, an abscess of the brain.

A foreign body, projected with great violence against the cranium, will penetrate the brain, without producing fatal consequences, since it may be encysted within the substance of the brain, and may absolutely remain there for a long time, without producing any very particular inconvenience. Various examples of the truth of the statement are on record, although I cannot say that any instance of the kind has occurred within my own experience. I must however, make an exception to this statement, inasmuch as I have seen a specimen of the length of time, in which an injury of the kind may exist without those results which in general, may be expected, not indeed in the human subject, but in a body resembling that of man, I mean the *monkey*.

I had a monkey given to me, which very much amused the younger members of the family. As winter approached, we were extremely anxious to preserve the life of the animal, which had manifested symptoms of pulmonary affection, for we were aware that the poor creature, indigenous to a warm climate, was subject to decay, in consequence of tubercles in the lungs. We provided accordingly; we placed it in a warmer situation than that which it had first occupied; we fed it with greater attention, that is to say, we nourished the animal with more care, and gave it meat, eggs, and the like, together too, with a little wine. (*Alaugh.*) Now the very reverse of the consequences, which we confidently expected from this treatment, took place: the poor animal became restless, it gave out signs of pain, it used continually to place its paw on its head, and at length it died. We examined the body, and what think you was the cause of death? There were no tubercles, no disease whatever of the lungs; but on inspecting the brain, we found in its substance the point of an arrow, which I concluded must have been in the same situation many months, nay, perhaps twelve months altogether. The great probability is that, when in its native haunts, the poor animal was wounded by a

hunter, and was in consequence made a captive. The marks of inflammation, were certainly in this case pretty evident. The rationale of the strange history, must undoubtedly be this, that the point of the arrow remained quiet, producing no manifest injury, exciting no pain, and wholly unattended with any loss of function, until the administration of stimulant diet. This plan increased the circulation of the monkey, brought on inflammation, which again was succeeded by suppuration, and a fatal termination.

Now gentlemen, I consider this to be a very instructive case, notwithstanding its occurrence in one of the lower animals, for it ought to satisfy you that a foreign body, remaining in the brain, may be suffered to continue there with perfect impunity, so long as a quiet and a temperate state are preserved; but once accelerate the circulation, and you may be sure of seeing inflammation, with its serious and often fatal results, follow as inevitable consequences.

Medico-Botanical Society.

LECTURE ON TOXICOLOGY,

Delivered by

JOHN CLENDINNING, M.D. Edinburgh
and Oxford.

Censor and Fellow of the Royal College of Physicians, and Professor of Toxicology to the Medico-Botanical Society of London.

February 14th, 1832.

MY LORD and GENTLEMEN,

It is probably well known to most of my hearers, that the plan agreed upon last year, and which, I believe, is to be followed up this year in the lecturing department of the society's business, is this—certain classes of vegetable substances were to be chosen by the society, and each class or group, in its turn, to form the subject of an address by each lecturer successively, and to be thus presented to your attention in four distinct points of view, in immediate succession: viz. in their botanical, chemical, pharmaceutical, and toxicological aspects. Now if we keep this understanding in mind, and recollect that owing to unavoidable difficulties no specific plan of co-operation, nor choice of subjects, nor order of precedence has been as yet determined on for the guidance of the lecturers for the present session, it will be easily perceived that the convenience of all parties will be best consulted by my confining myself, on this occasion, to matters of a general and preliminary nature.

In a former season, in my inaugural address, I had the honour of laying before the

society such observations relative to forensic medicine in general, and to toxicology in particular, as appeared to me suitable to the occasion, and object of the lecture. On that occasion I touched but slightly on the peculiar features of vegetable toxicology, as contradistinguished from the other subdivisions of this section of State Medicine, particularly that most important branch, the History of Mineral Poison. On this occasion I shall describe at greater length, but still, in a general way, the boundaries that separate the subject of vegetable poison from the domain or territory of general toxicology.

The line of demarcation between vegetable and mineral poison, may seem a very plain one. In general the respective limits of the organic kingdoms are easily ascertained; and if the proper object of medical classifications were theoretical symmetry, not practical utility, there can be no doubt that a classification of poisons, having a reference to the habitat and source of poisonous bodies, as either of vegetable, mineral, or animal origin, complete enough for all theoretical purposes, might, on such a basis, easily be constructed. But practical results and advantages are what the physician requires; and it is classifications of a substantial, available, practical utility, that the medical systematist is bound to provide. A classification of poisons, to be practically useful, must associate and group together those noxious bodies whose operation and treatment are analagous, however different soever may be their origin; and must separate and distinguish from each other, however close their natural relations, those bodies whose effects and remedies are, in important points, different from each other. It is well known that many writers on poison have grounded their classifications on the principle above alluded to. The illustrious Gmelin ex. gr. in his "Allgemeine geschichte der Gifte," treats of poisons in three great divisions—as mineral, vegetable, and animal. But more recent writers have found themselves under the necessity of abandoning altogether that principle of classification, and of adopting one, having reference not to the origins but to the effects of poisons. And the authority of Orfila and Christison would be abundantly sufficient to secure the universal adoption of the latter principle of arrangement. Were I called on therefore to discuss the subject of toxicology in general, I should not occupy your time in the discussion of any points of difference between different classes of poisons, those excepted of a practical bearing, and so to speak, marketable value. In this place, however, I am called to speak of vegetable poison only; the field to which I am to confine myself is sketched, at least in outline, by the society; on me devolves merely the task of collecting and arranging such general observations relative to the characteristic features of vegetable toxicology, contrasted principally with the other great

branch of the science that treats of the noxious powers of mineral bodies, as may seem to merit your attention this evening.

My remarks must necessarily be miscellaneous, but will be reducible to three principal heads, Literary or Historical, Chemical, and Physiological.

In my inaugural address, before alluded to, I remarked that the earliest authentic notice of any of the more active mineral poisons that I had met with, is as recent as the eleventh century, and to be found in the works of Avicenna. In no ancient account of death by poisoning, have I been able to trace any knowledge of the efficacy of mineral poisons. I have thought it worth while to examine a good many of those passages of early writers in which poison is spoken of as a means of homicide, and the result of my inquiry is, the conclusion just stated. I shall briefly refer to some of the most interesting instances. The noxious compound which Homer tells us in his *Odyssey*, Ulysses went to Ephra to procure, in order to besmear with it his arrows, appears to have been of an animal nature, or serpent poison. That used by the Roman ladies, who we are told by Livy were put to death as poisoners, by Fabius Maximus, Anno. A. U. C. 424, appears to have been of a vegetable nature. They were detected we are told, in the act of preparing it, *by boiling*. The poisons said by Livy and Plutarch to have been kept hidden in rings by Demosthenes and Hannibal, cannot now, for want of particulars, be ascertained: and the like may be said of the poisons administered, or caused to be administered, according to Livy, Valerius Maximus, Aulus Gellius, Tacitus, Polybius, and other historians—to Aratus, by Philip of Macedon; to the Proconsul Claudius, by Quarta Hostilia; to the Proconsul Posthumius Albinus, and to Claudius Asellus, respectively, by their wives Publicia and Licinia; to Attilius Régulus; to Germanicus, by Piso; to Drusus, by Sejanus; and to the Proconsul Silanus, by the Empress Agrippina.

The poison, however, which was prepared by Locusta, and administered to Britannicus by Nero's order, was, we are informed by Tacitus, prepared by *coction*, in a room of the imperial palace adjoining the banqueting room, and probably, therefore, consisted of vegetable elements. We are assured, indeed, by Pliny, that *Cicuta* and *Aconitum*, words which he, in his natural history, applies to certain poisonous plants only, were, in popular language, generic names for poison. Several ancient writers allude to the practice of using poison in war; and there is a passage in *Lucan's Pharsalia* which proves two things—viz. the use of vegetable poisons for purposes which mineral poisons would have served much better, and for which, had they been known, they certainly would have been preferred; and it further proves the use of

the word *Aconita* as a generic name for noxious substances:—

“O Fortunati! fugiens quos barbaris
hostis

“Fontibus immixto stravit per rura
veneno

“Hos licet in fluvios saniem tabermque
ferrarum

“Pallida Dictæis Cæsar nascentia saxis

“Infundas *Aconita* palum.”

It is well known that the use of hemlock as an instrument of death, was long established in Athens. The precise nature of the compound employed is not certain, but there is good reason to believe that it was a compound of vegetable narcotics and acrids. The symptoms described as preceding the death of Socrates, in the dialogue of Plato, called *Phædo*, are such as would be produced by a compound of that character. He is there said to have had *his eyes fixed, with heaviness and insensibility in his legs, and then great coldness in them, which by degrees seized the vital parts*. The poison said by Appian, in his second book of *Civil Wars of the Romans*, to have been put into the wells on the line of march of the soldiers of Curio, a partizan of Cæsar's, in his war with Pompey, was apparently of a vegetable nature. The symptoms mentioned by the historian are *somnolency, vomiting, and universal convulsions*; on the whole we cannot doubt that the learned Beckman is fully borne out in the assertions advanced in the first and second volumes of his *Beyträge zur geschichte der Erfindungen*, that the *poisons of the ancients were either vegetable or animal*, and that the *much stronger and universal mineral poisons were not known to them*. The truth unquestionably is, that early toxicologists were acquainted with but few of the more powerful vegetable, and with none of the principal mineral poisonous substances. The latter we owe entirely to modern chemical research; the former to the dauntless enterprise of modern travel. Opium, henbane, hemlock, probably monkshood, some noxious fungi, essential oil of almonds, nightshade, and hellebore, seem to have been the principal vegetable poisons known to the ancients. Some of these, as for example, opium, hyoscyamus, were more than 2000 years ago denounced by Nicander; others are mentioned by other subsequent writers. Of that terrible class, the strychnine poisons, of prussic or oxalic acids, of the numerous and potent vegetable alkaloid poisons, of the various American poisons, they certainly knew nothing. St. Ignatius' bean, the Upas Teiute, nux vomica, &c. are products of part of the world with which the ancients are not believed to have been acquainted. Of prussic acid poisons I have found no equivocal trace, except in the form of essential oil of almonds. Oxalic acid and the alkaloids are quite recent discoveries—of American poisons they were necessarily ignorant. That

charming, though fætid weed, which like the tea of the poet, may be said

"To cheer, but not inebriate,"

its votaries (tobacco), amongst the rest, was yet unknown. The time had not yet arrived when, in the language of the first Royal British Stuart, it could be said, "Quin eo deventum est ut vix hospitem sine tobacco dapsile putemus exceptum, sine tobacco nec medicina ulla est valida, nec solatidium suave." Of tobacco I may be allowed, en passant, to mention, that the first notice we have of it is in Columbus's account of his first visit to Cuba, in 1492:—"They beheld," says Irving, in the 1st vol. of his *Life of Columbus*, "several of the natives going about with firebrands in their hands, and certain dried herbs which they rolled up in a leaf, and lighting one end, put the other in their mouths, and continued inhaling and puffing out the smoke." About fourscore years later it was introduced into British Society by Sir Walter Raleigh, and in thirty or forty years became so general a favourite, as to be honoured with Royal denunciation. In 1619 was published the *Miscopagnus* of King James, in which we are assured that some young men expended annually to the value of 1600 ounces of silver on that luxury alone. At present there is not, perhaps, between the Arctic and Antarctic Circles, a nation or tribe with which tobacco is not a popular favourite.

Another feature in the history of vegetable poisons, that distinguishes it from that of mineral poisons is, that they have been extensively, and are to this day, used in war—a direction, which I cannot learn, has ever been given to noxious mineral agencies. Amongst ancient barbarians, poison seems to have been used both for envenoming the points of arrows, and for rendering the waters of springs deleterious. Ovid, Lucan, Silius, Claudian, speak of poisoned arrows as having been in use among the Getæ, the Parthians, and several African nations; and the poisoning of wells cannot have been rare amongst our ruder predecessors of early times, since we find it to have been practised even by a Roman general. In the second book of *Annæus Florus*, we find that Aquilus, a Roman commander, was guilty of such treachery most justly marked out for reprobation by Grotius, Puffendorf, and other great publicists—"Asiatici belli reliquias confecit mixtis (nefas!) veneno fontibus ad dedicationem quarundam urbium. Quares, ut maturam, ita infamem fuit victoriam, quippe, quum contra fas Deum, moresque majorum, medicaminibus impuris, in id tempus Lacro-santa Romana arma violasset."

I have already remarked that the use of poisoned weapons prevailed extensively among barbarians in ancient, or rather, early times, and from the writings of modern travellers, we learn that similar instruments of death are in use amongst whole nations on the con-

tinents of Asia, Africa, and America. In every instance that I have met with, the poison used amongst barbarous tribes, in hunting and in war, have been *vegetable* and *animal*, and in no instance *mineral*; indeed, the slowness of action, and comparative bulkiness of mineral poison, would render it unsuitable for the purposes of the huntsman, and to a great extent for those of the warrior also. And this (a priori) conclusion is confirmed by every thing we know concerning the most celebrated poisons used in barbarous countries. Of three or four of the best known and most deadly, we have particulars respecting their composition, in the writings of Mr. Waterton, Professor Lichtenstein, Baron Humboldt, Mr. Leschenault, and others. One of these is the milky juice of the manchineel tree; of the poisonous vapours exhaled from this tree most people have heard various accounts, which must be very much exaggerated. Baron Jacquin informs us that he has passed three hours under this tree without inconvenience, and has even received on his naked skin the rain which fell from the branches.

Another noted poison is the wooralí, of which Mr. Waterton gives an interesting account; the strongest wooralí poison (Mr. Waterton tells us in the account of his first travels in the Antilles) is made by a tribe of Indians that inhabit the forests of Demarara and Essequibo, and are called the Macoushi. This poison is used by all the Indians between the Amazons and Oronoko; the principal ingredient, he assures us, is the juice of a wild vine called wooralí, to which is added a root of a very bitter taste, the juice of two sorts of bulbous plants, two sorts of ants, a quantity of the strongest Indian pepper, and the pounded fangs of the Labarri and Counacouchi snakes. The whole is boiled in water down to the consistence of syrup, and to a deep brown colour, in which state the poison is fit for use. This seems to be the same as is called by others woorara, curara, ticunas, &c. the base of all which, we are informed by Humboldt, is the juice of a liana, one of the parasitical plants that abound in those countries.

Of the poison used in Southern Africa by the Bushmen, or Bosjemen, &c. the same may be said. Lichtenstein, in the second part of his "*Reisen*," and "*Lüdtlichen Afrika*," says that the principal ingredient of the latter is snake poison; to this the juices of some poisonous euphorbiæ are added, also the expressed juice of the bulb of the hæmanthus toxicarius, as well as some fourth ingredient of uncertain nature. He tells us that for warlike purposes, more of the snake poison; for hunting, more of the vegetable ingredients are used in the mixture.

Of the famous Upas poison of the Australian Isles, the exclusively vegetable nature may be unhesitatingly affirmed. We are assured by Mr. Leschenault, from personal observation, that it is prepared from the raspings of the

wood and bark of a tree called by the natives *Popon Antiar*, which are boiled down to a syrupy consistence, some onion, garlic, pepper, *kæmpferia*, galangæ, ginger, and a little capsicum being added towards the end of the vapourization. This is the *upas tieute*; the *upas antiar* is similarly made, and is not so formidable. Of the tree that produces these poisons, and which grows in Java, Borneo, and Macassar, still more extravagant accounts have been published than those that have been formerly given to the world, of the manchineel. It has been said to emit emanations deadly even to plants, so that for ten or twelve miles around the *Popon upas*, there is not a tree, bush, or even blade of grass to be seen.

A Flemish writer, of the name of Foersch, gravely assures us, that the Emperor of Java gives to criminals condemned to death, their pardon, on condition of their visiting this tree, and bringing back with them some of the poison. A priest resides on the borders of the infected district, who lodges the criminal, until a favourable wind sets in, and then sends him forward, having previously prepared him for death; at starting he bids adieu to his friends, and advances with a silver box, for the poison, in his possession, his head and chest covered with a sort of cap of leather, with glass eyes in it, and provided with leather gloves for his hands; so accoutred, "the priest assured me" (says Foersch) "that in the course of 30 years, in which he had resided there, 700 criminals had left his care in pursuit of the poison, on their way to the tree, and out of that number, but twenty two had returned alive." Of the truth of this grave story, we may judge by the following fact:—Mr. Leschenault assures us that he has seen lizards and insects on the trunk of the *upas tree*, and birds among its branches; he has also besmeared his face and hands with the milky juice, without any inconvenient consequences.

Vegetable poisons as a class, distinguish themselves from mineral poisons in their greater activity in small doses, and after equal intervals of time. Of the latter class, incomparably, the most deadly, is arsenic, yet I believe, there is no case on record of death, from a dose less than several grains, or after a less interval than five or six hours. The smallest fatal dose which Dr. Christison has met with in his extensive and accurate researches, is four grains; and the shortest interval, I think, five or six hours, as already mentioned. Now if we contrast with this, the effects of the *upas tieute*, and *ticunas*, or poisons of Java, and of South America, the principal ingredient, in both of which, is probably vegetable, and certainly not mineral, we cannot fail to perceive the greatly superior destructive energy of the latter. We are informed by Waterton, from his own observation, that the poison with which the Macoushi Indian arms the

point of the slight dart, which he shoots from his blow-pipe, at birds and other game, proves fatal in three minutes; yet that the quantity of poison, introduced in such cases, into the body of the animal, cannot exceed the fraction of a grain, we are warranted in inferring, partly from the smallness of the surface besmeared, partly from the fact, that the greater part apparently, of the poisonous compound they employ, consists of ingredients well known to be harmless; the inferior power of mineral poisons, is still further very strikingly illustrated by the comparative effects of the well known substances prussic acid and arsenic, each standing I may say, at the head of its class; it appears from the experiments of many physiological inquirers, that by a small quantity of the former, instant death may be produced at pleasure; if the dose be considerable, relative to the size of the animal, dissolution follows as speedily upon its application, as it would a thunderstroke or decapitation; an effect, which as far as we know, could not be produced by a whole stomachful of that most active of the mineral poisons, arsenic, and the strychnine, and some other vegetable poisons, enjoy a superiority in power, over mineral noxious substances, scarcely less considerable. In thus contrasting these two classes of destroying agents, a curious inquiry, readily suggests itself; vegetable poisons are much less stable in their composition, and in several instances, suffer modification from organic re-action, very soon after their introduction into the body; mineral poisons on the contrary, consist of ingredients held together by bonds, too strong to be so easily broken; the question then arises, may not the noxious influence of vegetable substances, although on some occasions diminished, on others nullified, be yet in some other instances enhanced? May not in some instances, it might be asked, the real agent be not the precise compound introduced into the body, but some *tertium quid* resulting from the mutual actions of that compound and the animal organs? but on this question, as savouring perhaps, too much of refinement, and, as being at all events, in the present imperfect state of our information, insusceptible of any very satisfactory elucidation, I shall not now enter—and I am the more confirmed in the propriety of waiving the consideration of this question by the fact, that there is another better ascertained principle by, or according to which, the greater number of facts bearing, or seeming to bear upon that question, may be tolerably well explained; it is well known that vegetable poisons, are much less enduring in their action than mineral. The dangerous and injurious impression which they make on the organism, is much more under the influence of circumstances, and what is to my present purpose, much more under the influence of time. If ex. gr. in case of poisoning by opium, alcohol, or other narcotic

poison, asphyxia can be kept at bay for some hours, there is often little doubt of recovery ; and this law of limited noxious action seems to hold good of all the principal vegetable poisons ; the most tremendous, probably of them all, is undoubtedly subjected to this law—I mean prussic acid ; the noxious impression of this agent, is indeed peculiarly transitory, so that in many instances, in which it must prove rapidly, if not instantaneously fatal, its deadly effects may be prevented by the employment of means calculated to disturb its operation, and keep its influence in check for a moderate portion of time. Not only may the operation, it would seem, of ample doses of this substance, be nullified by the prompt inhalation of the fumes of chlorine or ammonia, which being by many considered as strictly antidotes, are not so much to my present purpose ; but its agency may often, we are assured, be completely suspended, and ultimately neutralized and superseded by the exciting shock of the cold affusion, if quickly, boldly, and perseveringly employed. Whatever be the cause of this difference in durability of action between vegetable and mineral venoms, there can be no doubt whatever of the truth of our general position, and indeed from this law of action of vegetable poisons, important practical benefits, are likely hereafter to be derived, more particularly in the case of poisons, which act by asphyxia. In several such instances, it has been found, that complete recovery may be obtained by mechanical expansion and contraction of the chest, in imitation of natural respiration, and persevered in for some hours. Mr. Brodie has in this way restored an animal to life, that had been poisoned by *oil of bitter almonds* ; and Mr. Delille has in Paris employed in this process as a remedy against the effects of the *upas tieute* with like and repeated success ; and I cannot pass over this head, without remarking on the gratifying nature of these results ; such are genuine discoveries, not wind-falls, not creatures of accident, but true fruits of scientific industry, sagacity, and learning—it is a power acquired of rescuing the yet living from otherwise certain and imminent death, a power which philosophy only could discover or science employ.

I think there can be little doubt that the difference between the stabilities of those two classes of substances, lies at the bottom of the question above referred to ; and there is another consideration which gives additional probability to our solution ; vegetable poisons approach much more nearly in composition to animal substances than to mineral, and, therefore, when not immediately destroyed by organic re-action, are more readily mixed up with the fluids, and are more rapidly and easily eliminated from the body.

There are other points of difference between two classes of bodies under consideration, worthy of passing notice, and depending, like those last mentioned, probably in a great

measure, if not altogether, on their respective chemical constitutions. I allude to the influence of habit in modifying the effects of poisonous substances, and to the great difference that exists, in point of facility, of detection after death by chemical tests, between the same two classes of substances. With regard to the former, examples in illustration are familiar to most people of information. I have cited several remarkable instances in my inaugural address, from Pliny, Galen, Prosper Alpinus, and other sources, public or private, which I shall not now repeat. Scarcely any well authenticated instances of insensibility from habituation to the action of mineral poisons have been recorded. No length of time has sufficed to reconcile the constitution of man to any quantities of arsenic that may be considered dangerous ; no employment, however protracted, of the *tasteless ague drop*, or *Fowler's solution*, will enable us to dispense with the greatest caution in the use of this most valuable arsenical preparation. The same holds more or less accurately with regard to *mercury*, *baryta*, *tartar emetic*, and the other leading mineral poisons.

In the discourse formerly alluded to, I am aware that I have cited from Dr. Panqueville's "*Voyage en Moree*," a case of a Turk who we are assured, habitually consumed *corrosive sublimate* in drachm doses. But respecting the accuracy of this history, some doubts may reasonably be entertained.

Respecting the difficulty of detecting vegetable poisons by chemical tests, little need be said, from the known inferior stability of vegetable compounds that might be deduced (*a priori*), and it is confirmed by experience. With two or three remarkable exceptions, there are no tests of ascertained value in the detection of vegetable poisons. Those exceptions are the two *acids*, the *prussic* and the *oxalic*, to which possibly we may add *opium*. Towards the detection and identification of the large class, the poisonous *fungi*, that striking group the *strychnine poisons*, of the *lurida*, of the *euphorbia*, &c. chemistry has hitherto afforded no practical aid whatever. There is another interesting point of view, in which vegetable toxicology may be considered, and in which it is distinguished in rather a striking manner from that of minerals ; this difference likewise between the two great classes of noxious substances, which we have been all along contrasting with each other, depends on that difference in stability of chemical constitution existing between organic and inorganic compounds to which I have above repeatedly, for other purposes, referred ; the features of vegetable toxicology to which I allude, are that liability to degeneration of vegetable substances to which we owe the diseases called *ergotism* by the French writers, one form of which is known by the name of *Kriebelkrankheit*, amongst German authors, for which, however, we

have no name in this country, in which those diseases are scarcely known. Also to that decay of vegetable matter to which, to a greater or less extent, we attribute several of the severest scourges of humanity—*plague, ague, dysentery*, and several other formidable diseases; amongst the rest, and though last, not least, the redoubted *cholera*.

Mineral substances are no doubt also more or less liable to changes that might be called degenerations, from the action of external influences; but in the history of practical toxicology, I do not at this moment recollect a striking instance of a mineral body having, by spontaneous change of composition, been converted not merely from esculent or nutritious, but even from innocent to poisonous.

In a physiological point of view, also, vegetable are distinguishable from mineral poisons. Poisons in general are divisible into two great classes; the one, immediate and local in their action; the other, immediate and remote—the one proves noxious by exciting in the part to which they are applied a morbid action, which, if fatal, proves so generally, ultimately, and indirectly; the other class proves fatal, if not altogether, yet principally by a remote agency, a morbid influence being transmitted from the part to which they are applied through the circulation, or along the nerves to the brain and lungs, or to the heart, or to all three together. In the case of the former, or *local* poisons, death is the result of morbid actions in the parts first exposed to the noxious substance; and such morbid states have no specific peculiarity, but resemble the ordinary effects of the most frequent and familiar morbid causes; such as cold, mechanical injury, &c. Examples of this class of poisons are *corrosive and acrid substances*, such as the *mineral acids*, the *pure alkalies*, *mercurial*, *eupreous*, and other acrid substances, mineral, vegetable, or animal; they destroy life sometimes, but only when given in very large doses, by suspending at once the play of the brain or heart, or of both, and of course of the lungs; on the same principle, probably, as a fright, a blow, or other violent, physical, or moral impulse has been often known to do. Under other and ordinary circumstances, the deadly effects of acrid poisons are attributable to the local irritation or inflammation they produce, and are to be encountered as other gastritic, enteritic, or other local inflammatory affections. The latter class of poisons, which have been called in contra-distinction to the local, general poisons, owe their power of acting noxiously on remote parts to the anatomical and physiological relations existing between the brain and heart, and all other organs. In the part to which they are applied, they produce often no striking disturbance; but are, it would seem, potentially, by the vascular nerves, or in substance, by the venous current, transported to the centres of sensation and motion, and of circulation,

which appear to be the true seats of their poisonous action.

These poisons produce death either by asphyxia or syncope, or by sudden and irremediable, yet generally to the anatomist, indiscernible organic lesion, probably of the brain; to speak more fully, they destroy life in some one of the three following ways—either by a suspension of the function of the phrenic nerve, owing to cerebral torpefaction, whence *asphyxia*, arising from suspended action of the diaphragm; or by violent irritation of the motor nerves of the spine, whence *asphyxia*; again, owing to tonic spasm of the pectoral muscles, fixation of the ribs, and immobility of the chest; or, *secondly*, they prove fatal by sudden arrest of the circulation, owing to a paralysis of the heart, produced through the cardiac nerves, or still more circuitously through the brain, and eighth pair, or *par vagum*, that is, by *syncope*; or else, *thirdly*, they cause instantaneous death, i. e. destroy life by an instantaneous overwhelming shock to the whole nervous machinery, or to some of its principal portions, or, as Gall would have it, to some principal organs within the cranium, whence a sudden cessation of sense, thought, voluntary power, innervation, respiration, and circulation, together with complete insusceptibility of re-excitation, by any known means. This form of death, I may remark, though overlooked by Bichat, and most, if not all, subsequent physiologists, is, notwithstanding, of frequent occurrence. It has in practice been seen in greatest perfection in the operation of gaseous poisons, such as sulphuretted hydrogen, or the miasm of plague, or variola, when freely inspired; but has also been observed to follow the application of some vegetable poisons, particularly the prussic acid, administered in large doses, or under very favourable circumstances. A drop, for example, of that acid, introduced into a vein, has been observed, by Magendie, to strike the subject of the experiment as instantaneously dead as would a thunderbolt.

But to return from this digression: under the second head, or that of poisons of remote or sympathetic action, fall the principal vegetable poisons. In this division we find *opium*, *prussic acid*, *woorara*, *ticunas*, *upas*, and other strychnine poisons, *hemlock*, *henbane*, *thorn-apple*, *oxalic acid*, in most cases, *alcohol*, *monkshood*, *tobacco*, &c. &c.; in fact, the leading poisons of vegetable origin. Now the former, or section of poisons of local morbid action, contains the great majority of the poisons of the mineral kingdom, ex. gr. *copper*, *silver*, *tin*, *mercury*, and their compounds, *arsenic*, in some measure, *barytic* and *antimonial* poisons, in part, the mineral acids, and concentrated alkalies, altogether, range themselves amongst local poisons. There is, unquestionably, a large class of vegetable poisons whose action is likewise local: in numerical amount, indeed, by much

the largest portion of the botanico-toxicological catalogue; but in point of individual importance or general interest, this class of vegetable noxious substances is of very minor consequence. Amongst other reasons we are warranted in neglecting them in this place, because their operation is direct, local, and uncomplicated; because they are quite unsuitable for the purposes of the homicide, from being liable to effect their own expulsion by vomiting, and from being frequently characterised by strong sensible qualities, and from being further inconveniently rapid and striking in their operation; and lastly, because their treatment differs, after a very short interval from the ingestion, little, if at all, from that required by ordinary local irritation or inflammation.

With the preceding observations I shall conclude the present address. My reason for occupying the time of the society with a discourse of a popular complexion, and having so little pretension to a scientific character, I have already alluded to, namely, to leave quite open for future adoption, any order or principle of proceeding the society may hereafter think fit to prescribe to its lecturers. I have had a further private object in this line of conduct, and have not unwillingly availed myself of an opportunity of laying before the society some matters which, though of a slight and superficial description, if considered in their relations to toxicological science or practice, yet have seemed to me not altogether destitute of interest, or unworthy of the ear of the society. These may be considered as a fantasia prelude to the principal performance, and are submitted, not without diffidence, to the judgment of my fellow members.

Review.

A Treatise on the Diseases of the Heart and Great Vessels, comprising a new view of the Physiology of the Heart's Action. By J. HOPE, M.D. Senior Physician to the St. Mary-le-bone Infirmary of London, formerly House Physician and House Surgeon to the Royal Infirmary of Edinburgh, &c. &c.

(continued.)

PART II. is dedicated to the inflammatory affections of the heart and great vessels, under the heads of pe-

ricarditis, carditis, and inflammation of the internal membrane, both of the heart and arteries. We observe, with pleasure, that Dr. Hope has uniformly followed the French system, of giving precedence to the morbid anatomy. This mode of arrangement, obviously imperative in those diseases of cavities or organs which are mainly characterised by altered *physical* conditions, will, we are persuaded, be found most convenient and impressive in all records of disease. In our preceding Number, we had occasion to notice the fidelity and truly pictorial vividness of Dr. Hope's anatomical descriptions. As justifying of our praise, and, at the same time, as a model for the imitation of our young pathologists, we would willingly quote, if our limits did not forbid us, the whole of his account of the anatomical characters of pericarditis, which we esteem quite a masterpiece in this order of writing. We feel scruples in violating the unity of this admirable picture by disconnected citations, and refer the reader to the work, especially to page 84.

"The anatomical characters of acute inflammation of the pericardium are, 1. preternatural redness of the membrane; 2. coagulable lymph adhering to its surface; and 3. fluid effused within its cavity."

Again,

"1. *Preternatural redness of the pericardium.* The redness very seldom pervades the whole of the inflamed portion. It presents itself sometimes in numerous small scarlet specks with a natural colour of the intervening membrane, sometimes in spots of greater or less magnitude formed by the agglomeration of the specks, and sometimes in patches of considerable extent. Even these, however, have, almost without exception, a dotted or mottled character. In a drawing before me, which I made from a case of very acute and rapid pericarditis, nearly the whole of the reflected membrane, underneath a layer of soft primrose-coloured lymph, is of a vivid, mottled and dotted red."

"2. *Coagulable lymph adhering to the surface of the pericardium.*—The inflamed pericardium secretes serum and lymph conjointly, and in a fluid state, from the same

vessels. Soon after the secretion has taken place, the lymph concretes, while the serum remains fluid. The former, when recent, is of a pale straw-colour, and of a soft, tender consistence, becoming firmer and more tenacious as it grows older. Though occasionally deposited in detached lumps and spots, it generally forms continuous layers, sometimes covering a portion only, but more commonly the whole, or nearly the whole, of the pericardium. The thickness of the deposition may vary from a line to an inch; but, from a line and a half to three lines is its ordinary mean. Its adherent surface is smooth; the opposite is rough and singularly figured."

"3. *Fluid effused within the cavity of the pericardium.*—It has been stated that serum is effused conjointly with lymph, from the vessels of the inflamed pericardium. This fluid is sometimes transparent, and either of a faint yellow more or less tinged with green, as that of the interior of a lemon, or of a pale fawn colour; at other times it is less transparent, but very seldom milky or opaque from containing particles, filaments, or flakes of imperfectly concrete albumen. Its quantity, though variable, is in general considerable at the commencement, that is, within the first two, three, or four days of the disease, not unfrequently amounting to more than a pint."

"The muscular substance of the heart is, in general, not affected by pericarditis; but sometimes it is rendered redder or paler, browner or yellower, harder, softer, or more lacerable, than natural. These changes result from inflammation propagated from the pericardium to the muscular substance. They will be more fully considered in the article Carditis."

We now come to the diagnosis of pericarditis, which has always been regarded as, and very often is, eminently doubtful and difficult. Laennec has classed it with polypi and aneurism of the aorta, as diseases which he was unable to recognize with certainty; and he terms the diagnosis of pericarditis a kind of "divination," in which the most skilled observer is as frequently in error as successful, (tom. II. p. 660.) Dr. Hope thus enumerates the most usual symptoms of the disease:—

"Acute inflammatory fever; a pungent, burning, lancinating pain in the region of the heart, shooting to the left scapula, shoulder, and upper arm, but rarely descending below the elbow, or even quite to it. The pain is increased by full inspiration, by

stretching the left side, and especially by pressure between the præcordial ribs, and forcing the epigastrium upwards underneath the left hypocondrium. When the inflammation is only subacute, the pain is more or less dull, and does not lancinate. The next symptoms are, inability of lying on the left side, and sometimes in any position but one, which is most commonly on the back; dry cough; hurried respiration; palpitation of the heart, the impulse of which is sometimes violent, bounding, and regular, though its beats may, at the same time, be unequal in strength; at other times it is feeble, fluttering, and irregular; pulse always frequent, and generally, at the onset, full, hard, jerking, and often with a thrill. Sometimes it maintains these characters throughout, but more commonly it becomes, after a few days, weaker than accords with the strength of the heart's action, and, in the worst cases, small, feeble, intermittent, irregular, and unequal. Occasionally it possesses the latter characters from the commencement; whenever they exist, they are accompanied by dyspnoea; a constrained position, deviation from which induces a feeling of suffocation; extreme anxiety; a peculiar drawn or contracted appearance of the features, occasionally with the sardonic grin; faintness, constant jactitation, insupportable distress and alarm, cold perspiration, and, finally, from obstruction of the circulation, by intumescence and lividity of the face and extremities."

He afterwards describes the *physical* signs, pp. 108 and 110. We must confess that these physical indications, common as they are to a vast number, not only of the organic, but of the functional derangements of the heart, appear to us almost valueless in the proofs of differential diagnosis. Dr. Hope's plan of treatment we think most judicious and efficient. Prompt and copious depletion from the arm at first, and by covering the region of the heart with leeches, with the other antiphlogistic measures, constitute, of course, the leading features of his practice, and need not be enlarged upon here. But he justly continues, "the antiphlogistic treatment alone is not to be relied on."—p. 120. "Antiphlogistic measures can neither prevent the effusion of lymph, nor with any degree of certainty, cause its absorption. Mercury can do this, as is

visibly displayed in iritis: mercury, therefore, is the sheet anchor of the practitioner."—p. 121.

His remarks on adhesion of the pericardium are valuable, and in some respects novel.—Vide pp. 126 and 127. We think his observation that, "I have never examined a case of complete adhesion of the pericardium, without finding enlargement of the heart—generally hypertrophy with dilatation," deserving of much attention. He thus attempts to explain the co-existence of these two structural changes:—

"How adhesion occasions hypertrophy is easily understood; for the organ must increase its contractile energy, in order to contend against the obstacle which the adhesion, by shackling its movements, presents to the due discharge of its function; and, as explained in the article on hypertrophy, increased action leads to increase of nutrition. The cause of the co-existent dilatation is not less manifest. As the shackled organ transmits its contents with difficulty, it is constantly in a state of greater congestion than natural, and, as is more fully explained in the article on dilatation, permanent distention is the most effective cause of this affection. When the muscular substance is softened, as frequently happens, dilatation takes place much more readily, in consequence of the deficient elasticity or tone of the heart's parietes."

Now, without at all disputing the justness of this reasoning, we think that the inflammatory process itself, which gave birth to the pseudo-membranous attachments, may in many cases be also the parent of the hypertrophic dilatation. "Wherever," says Andral, (*Clin. Med.* t. III. p. 460), "the muscles of organic life are in contact with an inflamed membrane, whether mucous or serous, they have a remarkable tendency to become the seat of a more active nutrition. This is especially manifest in the muscular coat of the stomach, intestines, and bladder, when their mucous investment is affected with chronic inflammation." He appeals to many cases in which he has witnessed hypertrophy of the

walls of the heart, with or without modification of its cavities, evidently originating in an acute or chronic inflammation, either of the pericardium, of the internal membrane of the heart, or of the aorta. Carditis is a disease of extremely rare occurrence. Indeed, muscular tissue in general, is singularly exempt from inflammatory action; its purulent infiltration being most commonly, if not always, referrible to suppuration of the intestinal cellular structure. Dr. Hope quotes from Dr. Latham, one case of universal carditis, which seems to be the only example on record. "Partial carditis," says he, "is not very uncommon, &c."—p. 134.

Chap. III. contains an admirable history of arteritis, and is especially valuable for its just discrimination of the post mortem appearances, which are really symbols of pre-existent disease, from those which are merely cadaveric. One of the most elaborate of the recent French works, the *Traite of Bertin*, edited by Bouillaud, is disfigured by most total misapprehensions of the nature of these appearances. Redness of the internal membrane is, by these writers, uniformly ascribed to previous inflammatory disease; and since a red tinge is far from uncommon in the lining membrane of the aorta and large vessels, they have been compelled into the gratuitous admission of a disease without symptoms. Laennec was the first to demonstrate by experiment, that the various shades of scarlet, violet, and purple dye, are, in a large proportion of cases, produced by cadaveric imbibition of the colouring matter of the blood. Our author has described all these appearances and experiments with fidelity and precision, and has adopted the views of Laennec. He then proceeds to a more decided order of appearances, furnishing the evidence of inflammation.

"Whether redness be due to vascularity alone, or to this conjoined with imbibition,

its inflammatory nature is known by the presence of other anatomical characters of inflammation. These are thickening, swelling, and puffiness of the inner membrane; an effusion of lymph on either its free or adherent surface; and a preternatural vascularity, with softening and thickening of the middle arterial coat. Each of the coats, also, may be separated from the other with much greater facility than natural, by scraping with the nail or scalpel. The internal and middle coats, in short, present all the phenomena of the adhesive inflammation as it displays itself in other membranes."

We cannot withhold our praise from the account of the abrasions, or ulcers, as they have been less properly termed, of the internal membrane, in pp. 151, 152, 153. Dr. Hope proceeds to the morbid alterations in the coats of arteries, which appear to be of chronic formation.—

"The most simple morbid alteration is, a loss of elasticity, generally, accompanied with increased density and opacity, of the coats of the artery. This state is sufficient of itself to give rise to dilatation, because (as will be more fully explained under the head of dilatation of the aorta) the elasticity and tone of an artery are the powers by which it resists the distending force of the blood.

"The next and the most common morbid appearance is that of small, opaque, straw-coloured spots, immediately underneath the lining membrane, with slight inequality and corrugation of the membrane around them. At a more advanced period the depositions form considerable, slightly elevated patches, which becoming confluent, sometimes overspread the whole surface. Some of these patches have much the appearance and consistence of bee's-wax, or cheese, though in general their cohesion and flexibility are greater. These are usually denominated steatomatous. Others, presenting nearly the same colour, have a fibrous or ligamentous appearance; while others, again, are more translucent, white, and elastic, like cartilage, or fibro-cartilage."

His description of the symptoms of arteritis is, from the nature of the subject, necessarily imperfect. The disease is, indeed, eminently obscure, and will, we fancy, rarely be recognized, except in the anatomical theatre. In the treatment, p. 175, Dr. Hope recommends mercury, under certain limitations. In a suspected case, in the clinical wards of Edinburgh, we have seen mercury

exhibited with advantage, by that enlightened and sagacious physician, Professor Alison.

Part III. being devoted to the organic affections, is necessarily the most bulky and most important. The first chapter treats of *Hypertrophy*—a disease which has only of late years been analysed with scientific precision, and distinguished by a just nomenclature, from the alterations of capacity of the cavities, with which it is often, but not necessarily, accompanied. Dr. Hope has, in p. 187, very distinctly characterized the several varieties of hypertrophy, judiciously discarding the terms *active* and *passive aneurism* of Corvisart, which, as often inconsistent with the actual state of anatomical science, cannot be too soon consigned to oblivion. The exact description of hypertrophy, in pp. 183, 184, is followed, pp. 187, 188, by an analysis of the causes in which it has its origin.

Section III. contains, compressed within a few pages, an admirable explanation of the order and mode in which the several compartments of the heart undergo organic changes, from an obstacle before them in the course of the circulation. We strongly recommend this section to the attentive perusal of the reader, as it constitutes by far the most simple, yet perfect key, to an extremely intricate and perplexing subject, which has yet been given.

A Critical and Experimental Essay on the Circulation of the Blood; especially observed in the Minute and Capillary Vessels of the Batrachia, and of Fishes. By MARSHALL HALL, M.D. F.R.S. E.M.R.I. M.L.S. &c. 8vo. pp. 187, Ten Plates. London, 1831; R. B. Seely.

THIS work is a critical and experimental examination of the received

opinions of the most celebrated physiologists on the circulation of the blood; and the author endeavours to overturn many of the doctrines of his predecessors. He faithfully extracts their statements, offers his comments thereon, details his inferences from similar experiments performed by himself, and very often arrives at opposite conclusions. As the greater part of this production consists in extracts from most of the modern works on physiology, we need not insert quotations; and, therefore, we shall content ourselves with the citation of most of the author's original opinions.

In a well written preface, Dr. Hall lays down admirable rules for the guidance of physiologists in experimenting on animals; and among other curious facts we find the following:—

“The fact of the removal of the entire brain and spinal marrow, in the frog, without the immediate extinction of life, conjoined with the similar operation upon the chick in the egg, on the third day of incubation, without interfering either with its life or development, sufficiently establishes the independence of the circulation of the brain and spinal marrow, in a degree far beyond what is deducible from the experiments of Whytt or Spallanzani; of Dr. Philip or M. Flourens.

“But the latter fact, together with that of fœtuses born perfectly grown without either brain or spinal marrow, seems to show that the functions of nutrition and of secretion are equally independent of the brain and spinal marrow.”

Dr. Hall argues powerfully that the true capillaries are dissimilar to minute arteries and veins. “They do not become smaller by subdivision, nor larger by conjunction; but they are characterized by continual and successive union and division or anastomoses, whilst they retain a nearly uniform diameter.” Our author thinks it erroneous to speak of capillary arteries, or capillary veins. The capillaries are a distinct set of vessels. We are rather surprised at the following declaration, “that there is not in any published work, any accurate account of the minute and capillary vessels and circulation; or any ac-

count at all of the minute and capillary circulation in the lungs.” We cannot assent to the first part of this proposition, but we are ready to admit that the author's description of the capillaries in the lungs is, perhaps, one of the best hitherto offered. He thinks the circle performed by the blood may be divided into four arcs: of these, the heart is the first, the arteries the second, the capillaries the third, and veins the fourth. He cites the remarks of Galen on the valvular structure of the heart; and then quotes the whole of the illustrious Harvey's description of the circulation. We have next the opinions of Haller and Spallanzani; but not a word about those of Servetus. Had Dr. Hall perused Dr. Sigmond's translation of Servetus's work, we are satisfied he would not have passed over the strong claims of that unfortunate individual to a correct view of the circulation. The opinions of John Hunter, and Dr. Barry, come next in order, and these are succeeded by an inquiry “of the extent of the influence of the heart on the circulation.” To this is added evidence of the muscularity of the arteries. Our author denies the power of irritability in the true capillaries, and of course is opposed to Dr. Philip.

He next examines “the influence of the acts of inspiration and expiration, upon the venous circulation,” and in common with Laennec, does ample justice to Dr. Barry's discovery. He examines Dr. Philip's argument on the other side; and concludes, “but I confess, I think it still remains to be determined, where the influence of inspiration and of the atmospheric pressure begins; or in other words, how far it extends from the thorax itself.”

The succeeding chapter is on the “influence of the brain and spinal marrow upon the circulation,” in which we find an account of the experiments of Spallanzani, Fontana, Whytt, Legallois, Philip, Clift, Flourens, Brachet, &c.

The experiments instituted by Whytt, now almost forgotten, are appropriately introduced, as they go to prove, that the contraction of the heart, after its removal from the body, is not so recent a discovery as many writers seem to imagine. In one case the contraction of the heart continued, at the expiration of six hours after the decollation, and destruction of the spinal marrow of a frog. Various experiments of this kind, seem to prove that, from the moment of the abstraction of the brain and spinal marrow, the irritability of the heart begins to fail. The circulation is first enfeebled, then lost, in the most distant parts of the system, then in parts less and less remote.

Dr. Hall has repeated many of the experiments of Legallois, Philip, and Flourens and often dissents from the conclusions of these distinguished physiologists.

The limits by which we are necessarily circumscribed, oblige us, to desist from further analysis, and we must content ourselves with introducing the author's recapitulation of the prominent points of this able essay. We congratulate Dr. Hall on the ability and zeal with which he has prosecuted his inquiries; and we are satisfied, that this work will greatly add to his well earned reputation. It proves him to be an able physiologist, and affords additional evidence in attestation of the accuracy of most of his original views, as a voluminous writer on this practice of medicine. The following, is Dr. Hall's recapitulation:—

"The points to which the attention of the scientific physician is particularly called in the preceding essay, are:

"1. The distinction between the ultimate minute arteries, the true capillaries, and the first roots and minute trunks of the veins;

"2. The successive divisions of the minute arteries, the continual conjunctions and re-divisions of the capillaries, and the successive conjunctions and occasional anastomoses of the veins;

"3. The characteristic rapid flow of the

blood along the arteries, and its retarded flow along the capillaries and veins;

"4. The singular differences in the form and distribution of these vessels in the systemic and pulmonary systems; especially,

"5. The more abrupt divisions of the arteries, the more crowded number of the capillaries, and the abrupt formation of the veins, in the latter;

"6. The extensive power of the heart in the circulation, the irritability of the arteries, the want of evidence of irritability in the true capillaries, and the effect of the respiratory and other muscular motions upon the course of the blood along the veins;

"7. The doubt whether the true capillaries be real vessels or mere canals;

"8. The temporary independence of the action of the heart and of the minute and capillary circulation, of the brain and the medulla oblongata and spinalis;

"9. The power of the heart to continue the circulation in the minute and capillary vessels, after its entire removal from the body, in opposition to the opinion of Legallois;

"10. The independence of the circulation of respiration and of that part of the medulla on which respiration depends, in opposition to the opinion of M. Flourens;

"11. The independence of the capillary circulation of a part, upon that part of the spinal marrow from which it derives its nerves, in opposition to the opinion of Legallois and the original opinion of M. Flourens;

"12. The extraordinary difference of removing the brain and medullæ, at once, and in successive portions at distinct intervals;

"13. The erroneous mode of explanation of this fact, given by Legallois; another suggested;

"14. The temporary independence of the circulation in the minute and capillary vessels, of the entire nervous masses, brain, medullæ, and ganglia;

"15. The effect of opium and alcohol upon the batrachia;

"16. The effect of alcohol applied to the brain and spinal marrow, upon the action of the heart and the circulation;

"17. The effect of crushing the brain and spinal marrow; compared with

"18. The effect of crushing other organs or parts, upon the circulation;

"19. The general sympathy of these different organs proved by these experiments; and

"20. The want of any physiological deduction as to the natural functions of the parts themselves individually;

"21. The effects of irritants applied to the web, upon the vessels which pass between its membranes;

"22. The impossibility of forming any deduction from this experiment, upon the

nature and function of the true capillaries;

"23. The singular phenomenon of a caudal heart or ventricle in the eel:

"24. The test of muscular structure afforded by water of temperatures moderately higher than that of the blood."

"The history of opinion on the subjects of this essay, is as follows:

"1. There is no accurate account of the *anatomy* of the minute and capillary vessels; the sketch of the pulmonary vessels given by Malpighi, is, however, a literary curiosity, and highly interesting, considering its early date;

"2. The circulation of the blood was first amply proved from anatomy and experiment by Harvey;

"3. Harvey, Haller, and Spallanzani, alike erred in denying a muscular power to the arteries;

"4. Bichat doubly erred, 1. by denying the muscular power to the arteries, and 2. by ascribing a power to the capillaries of which there is hitherto no proof;

"5. Hunter seems first to have had clear views of the muscular power of the arteries;

"6. The proof of the irritability of the arteries was still deficient, until the discovery of an artery which actually pulsates, independently of the heart, in some of the batrachia;

"7. The influence of atmospheric pressure in aiding the circulation in the veins, was clearly suggested by Huxham, but actually proved by experiment, by Dr. Barry;

"8. The opinion of Haller, in regard to the irritability of the muscular fibre, is still, under certain limitations, the true one;

"9. The voluntary and involuntary muscles alike retain their irritability for a time, after their communication with the nervous system is cut off; both gradually lose it;

"10. The experiment of removing the brain and spinal marrow, and of watching the effect on the heart and capillary circulation, belongs to a former day, and especially to Whytt and Spallanzani;

"11. The repetitions of this experiment by Legallois, Dr. Philip, M. Flourens, and M. Brachet are, in my opinion, less satisfactory than the original experiments of Whytt and Spallanzani, having occupied less time, and consequently afforded less scope for observation;

"12. Nothing appears to have been added to the original experiments, except the important fact of the difference between removing the brain and spinal marrow at once, and by portions at distant intervals, a fact discovered by Legallois;

"13. On the other hand, some of the opinions of the more modern experimenters

appear to me to be unfounded; for example—

"14. (1.) The opinion of Legallois, that to destroy a portion of the spinal marrow annihilates the circulation in the parts which derive their nerves from it; and

"15. (2.) That of M. Flourens, that the circulation depends upon that part of the medulla on which respiration depends."

The author announces "an analysis and comparison of the works of Legallois, Philip, Bell, Flourens, &c. on the nervous system; and is likewise engaged in a series of experiments, on the function of respiration." We wish him every success in his illustrations of this important function in the animal economy.

Westminster Medical Society.

February 25th, 1832.

MR. CHINNOCK in the Chair.

THE minutes of the last meeting having been read and confirmed,

M. Halma Grand was elected an honorary member, and Messrs. Griffiths, Asdart, Leese, jun. and Hodges, ordinary members of the society.

Dr. Fergusson then adverted to the conduct of Dr. Wilson Philip, in still advertising his pamphlet on cholera as "drawn up at the request of the Westminster Medical Society," and thought that some measures should be taken to prevent the society's name being made use of without authority.

The President called him to order, and observed that as the subject had been considered and disposed of, it would be necessary for all future remarks to be addressed to the committee.

Dr. Gilekrest then stated that it was said in a respectable journal, that he had passed an eulogium on the Central Board of Health, which he denied having done. He then said that he had observed that

printed papers, on the progress of cholera, had been distributed to the members, and he was desirous of knowing whether this was usual—whether it was proper?

Dr. Stewart then stated that he was desirous of setting himself right with the profession, in regard to a petition concerning the cholera which he had signed. It had gone forth to the world, through the medium of the public press, that this petition alluded to the question of contagion, whereas it merely asked for a new inquiry on the nature of the cholera said to be at present in London. The President then said that he hoped the members would condense their observations as much as possible; and that each should only rise once, so as to give all an opportunity of expressing their sentiments; and remarked that on a late occasion there had been any thing but the dignified conduct they ought to have exhibited. According to the laws of the society, the first half-hour was allotted to the introduction of interesting cases, which any gentleman might deem proper to bring before the society; after which he should call upon Dr. Epps to open the discussion.

Mr. Hooper said that as the first half-hour was allotted for interesting cases, he would lay before the society some cases of cholera, which had fallen under his observation within the last two or three days; more especially as it had been said that there were no new cases in the Borough. There had been three new cases between Sunday and Tuesday. He remarked that, under proper treatment, patients would be apparently relieved, and yet sink as rapidly as they had rallied. He should beg leave to correct Dr. James Johnson for a mistake which he had fallen into with regard to one of these cases. Dr. J. had been informed by the nurse that the patient had made water, but the fact was, that the liquid passed came from the bowels.

Dr. J. Johnson inquired how he ascertained that?

Mr. Hooper answered, by the smell, and likewise from the assertion of the woman herself. He then proceeded to detail the *post mortem* appearances, and added that his chief motive in rising was to state that there had been some new cases in the Borough, and that there were modified cases continually occurring.

The President then called upon Dr. Epps to open the discussion.

Dr. Epps said that he believed the question to be considered that evening was, whether the symptoms of the prevailing epidemic were similar to those of the Asiatic cholera; and whether the cholera in London was a new disease or not? (*Hear, hear*). As it was said that the symptoms were similar to those of the disease in India, he had had a paper printed, and sent round among the members to save time. The first column contained the Indian symptoms, extracted from a paper written by Dr. Foote, of the 17th Regt.; the next is the remarkable case of John James; the next three occurred this present month; while the last three took place at Rotherhithe, during the month of August.

The Doctor said that if we are justified in concluding from similarity of symptoms, identity of disease, then this is the Indian cholera; but he thought that we are not justified in inferring any such thing; and the Central Board of Health had acknowledged that similarity of symptoms is no proof of the existence of cholera, in the case of Florence Sullivan, and it should seem that the *post mortem* appearances are alone to be depended on. Dr. Epps then drew a parallel between the pathological appearances found on examining John James and Mrs. Roberts, and was of opinion that they greatly resembled the morbid appearances which had been described by the Indian practitioners. A great stress had been laid on the sup-

pression of urine, but he thought that it would require great delicacy of discernment to prove this suppression in cases of females, especially when the spasms were very urgent. It appeared that Mrs. Roberts had pawned her flannel petticoat the day before she was attacked, in order to get gin; and yet her liver was said to be healthy. He believed that spirituous liquors had always a peculiar effect on the liver, and yet this case was adduced as a case of cholera. From these facts he thought we were not justified in inferring identity from similarity, at least, not without further evidence. He then proceeded to examine the question of contagion, and said, that as yet there had been no proofs of contagion in London, though great numbers were continually visiting the sick in their apartments. He visited a house yesterday, where there were a man and child lying dead of the disease, and sixty Irish women were waking them, some of them lying on the corpses. He thought that there was a great severity in the present cholera, from its rapid fatality, patients being seized in the morning, and dead at night; many of them being seized at four in the morning, the hour when the Indian cholera generally seized its victims; from the rapid prostration of strength, it not being by any means so rapid in the common cholera, and also from the great peculiarity of the voice, which was so unusual, that no language could describe it. He did not mean to explain this severity of the disease, by supposing a transplantation of the Indian cholera, but thought that it was to be ascribed to the peculiar circumstances under which the disease was developed, owing to the state of the atmosphere, the barometric pressure, and the thermometric changes. There was at present a peculiar diarrhoea very generally prevalent, which he thought was owing to a certain constitution of the atmosphere, and which, co-

operating with the great destitution among the poor, greater than it had been for the last thirty years, the want of clothing and bedding, the exposure to the heat of the day, and subsequently to the cold of the night, with bad and insufficient food, are more than enough to account for disease—(*Hear, hear.*) Dr. Epps further stated that the common food of the poor at present, was *greens and bad salt fish*. He thought the fear of cholera more generally prevailed among the higher than the lower classes, and again adduced the example of the Irish waking their choleric dead: he considered that they met rather to drink whiskey and other spirits, than for any respect for the dead.—(*Cries of no, no, order.*) The Doctor concluded, by saying, that there was not sufficient evidence to enable us to advocate the opinion that this disease was the Indian cholera, and that, therefore, no set of beings were justified in passing a Bill which would injure commerce so materially—(*Loud and continued applause.*)

Dr. Webster thought it would be more advantageous to discuss whether the cholera be a new disease or not, than whether it be identical with the Indian malady; whether it be indeed a *nova pestis*, of so virulent a nature that, as had been well expressed in that society, a wall of brass could not keep it out. If it be only an old disease under a new form, it would not be the experience of the army, navy, and Indian practitioners which would be needed, but of those London physicians and surgeons who are well acquainted with the constitutions and diseases of the poor. The question should not be whether this disease is the same as that of Poland or India, but, whether it has ever occurred in London previous to this visitation?—and the medical men of London alone could tell us.

This disease may be the same as the cholera of former years; it does not follow, because we have

hitherto seen it very mild; that it may not have exhibited itself in a more severe form to earlier practitioners; we meet daily with similar modifications in typhus fever; we have some cases very mild indeed, while others are to the full as severe, and yet no one denies it to be the same disease. Cholera is probably an old enemy with a new face. In regard to contagion, there is not the slightest proof of its existence in London, and this was the unanimous opinion of another society. (*No, no, from Mr. Field.*) Well, then, not altogether unanimous: those, who are contagionists, are generally those who have never seen the disease, and will probably change their opinion, when they have witnessed a case. In proof of the ridiculous height, to which the fears of the people have been carried, many instances might be stated, but the following will serve to point it out fully: a man fell down in the street in a fit of apoplexy, and was carried into the Surrey Dispensary, to which he was attached, and he was bled; a hackney coach was sent for to convey him home, but jarvey, being probably suspicious of what kind of fare he was to take, declared roundly that he must see his customer first. (*Laughter.*) He was taken up stairs, and when he saw the unfortunate man lying pale, and covered with blood, he exclaimed, "*No, I'll none of him, he's got the cholera morbus.*" (*Laughter.*) And in spite of all that could be urged, the man drove off without his fare. An eminent medical man advised large proprietors of hackney coaches, to apply to Parliament, for a Bill enabling them to refuse all such fares. (*Laughter and astonishment.*)

Dr. Negri then read the details of some cases of cholera, which had occurred lately, and he described very minutely the pathological appearances, which were found on examining one of Mr. Hooper's cases.

Dr. Negri assimilated the cases with typhus fever, but with this difference, that he thought cholera began where typhus ended.

Dr. Sigmond alluded to one of the cases described by Mr. Hooper, which he averred was not a case of cholera, but one of *starvation*. He had seen the case, and had made numerous inquiries into its history, both personally, and by a pupil of his. His authority was the person with whom she cohabited, and he learnt that she had been in a state of starvation for upwards of a week, and had suffered from marked symptoms of disease, for some time previous. The symptoms which she evinced, were those which had been described by Hippocrates 2000 years ago. He thought that this was not a case on which to ground the report of the existence of malignant cholera.

Mr. Hooper informed the society, that her paramour had informed him that the woman alluded to, and himself had only had a penny loaf for a fortnight; but as the woman was out all day long, he could not tell what food she might thus have had. On cutting through the abdomen, he had found an inch of fat, and also raisin stones in the appendix vermiformis: from these circumstances, and from her not being at all emaciated, he was inclined to doubt her dying of starvation.

Dr. Stewart stated that he had visited Limehouse on Tuesday, and had seen two cases, which did not appear to him to be very severe; at St. George's Fields, he was told that all the cases were dead. He had likewise seen a case in St. Giles's, which was since dead, as likewise the two in Limehouse, as he had personally ascertained. He had gone on board the Dover, the cholera ship, had seen six cases, and was told that there had been four deaths. Dr. S. thought that the appearances of cases simultaneously in various parts of the town, is proof that contagion at least

is not the sole cause of its spreading ; at the same time, he did not wish to deny, that under certain circumstances, one person might infect another.

Mr. Field inquired, whether Dr. Stewart considered it to be a new disease ?

Dr. Stewart had certainly seen many approaches to the disease before, but no case so severe as the present disease. He considered that there was something about the disease, which could not be made out by the symptoms, as the patients might appear to be doing well, and yet sink in spite of every thing.

Dr. Gilckrest inquired of Dr. S. whether he had been purified or fumigated, on his return from the Dover ? (*Laughter.*)

Dr. Stewart, most certainly not.

Dr. J. Johnson said, that as Mr. Hooper had alluded to him, in relating a case from the cholera hospital, he would make some remarks on that subject. He visited the female on the second day, and found the room flooded, and the nurse told him, it was owing to the patient having made water unconsciously. He certainly did not examine it by the smell, but he could not believe it came from the intestines, because, on examining them after death, they were found to be loaded with a thick, tenacious, bilious mucus, for the truth of which he appealed to Dr. Negri ; (Dr. Negri here said, "from the stomach downwards ;") and therefore the patient could not have passed this fluid from the bowels ; urine was also found in the bladder.

In only one case that the Dr. saw were there spasms, and that was not a case of cholera ; it was a recurrence of spasms, to which the man was subject from drinking porter. The disease was very different from that he had seen in India, not only in its symptoms, but also in its stages. In India, the disease was occasionally preceded by diarrhoea, here it was

always : in India it was the exception, here it was the general rule ; another great difference was the consecutive fever ; in the Bengal reports, the occurrence of this fever is alluded to, as a remarkable feature of the disease ; but here, when the blue or cold stage has passed, it is a general rule to have consecutive fever. These distinctions are so great as to oblige Dr. J. to consider it as a new disease : two-thirds of the European malady being different from the Indian. Indeed there was only one stage resembling the Indian, and that one exactly resembled the cold stage of malignant, remittent, intermittent, and other fevers. (*Hear, hear.*) It is remarkable how some of our most violent opponents come round ; the *Medical Gazette*, of this day, says it is the cold stage of a fever, after arguing night after night in this society, and week after week, for its being the Indian cholera for so long a period. He thought that it was caused by some physical changes in the parts where it was generated, and that it was not imported ; and, in respect to contagion, he declared that, in spite of the severest examination, he could not discover the slightest trace of it, SO HELP HIM GOD. If gentlemen would visit the hovels in the Borough, they would see cause enough for the disease, without having recourse to contagion : he had seen a woman lying on a truss, of straw, *which had not been changed for nine weeks*, and had lived on potatoes only, for a long while : her husband declared that he had not the means of purchasing another truss : she was in the last stage of a gastro-enteritis. It was in the origin of disease only that its contagious or non-contagious nature can be discovered ; when it has spread far and wide, it is impossible to tell. A child in James-street, Mary-le-bone, which had been ailing for two years, was declared by Sir William Russel and Dr. Gregory to have had cholera, because its father had visited the Borough two days

before it died. (*Laughter.*) He considered it to be an epidemic, over which we had no controul, but arising in our climate, and confined to certain classes.

Dr. Copland was desirous of knowing whether Dr. Johnson considered that it differed from the Indian cholera previous to 1817, or since that period.?

Dr. Johnson said that it differed from the cholera that he had seen, and he thought it differed from the disease that appeared in 1817, from the description of it which he had read.

Mr. Fisher then described a cholera tour he had made, and said that, among other places, he had visited the *Cholera Floating Hospital*, where there had been two cases received from a vessel from Inverness. The subject of one was an intemperate dyspeptic.

Dr. Copland inquired if that vessel had touched at any of the infected places?

Mr. Fisher replied that it had come straight, without touching any where.

Dr. Copland thought that in regard to contagion, the cases as yet in London, were not sufficient to warrant an opinion. He then moved an adjournment.

The society meets again at the Hunterian Museum. Dr. Copland to open the debate.

following:—In the course of Sir Charles Bell's experiments on the nerves, he laid bare the fifth nerve in the face of an ass, and the moment the animal was killed, on irritating it, the muscles of the lower jaw acted, and it closed with a snap. This could only happen through the influence of the anterior or motor root, which is entirely distributed to these muscles. Now, according to Mr. West, this stimulus applied to the nerve ought to have increased its restraining influence, and the muscles of the jaw ought thereby to have been relaxed. Or perhaps he will say that this influence was entirely destroyed by the irritation, and that in this manner the muscles were allowed to act. How then does he account for the next experiment, in which the same nerve was *divided* in a *living* animal, and the consequence was, the jaw fell powerless? If we believe Mr. West's theory correct, the results of these two experiments ought to have been reversed; and in this latter case we ought to have had contraction of the muscles. To this he may answer by quoting another part of his paper, "that the division of a nerve produces paralysis by interrupting the communication of volition." But in this case the communication was not interrupted, but was kept up by branches from the other divisions of the fifth, for the sensibility was not entirely destroyed.

These circumstances occurred to my mind on reading Mr. West's paper, and if, in order to have them explained, you will allow them to have a place in your Journal, you will very much oblige,

Your obedient Servant,

Δ. Δ.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I READ with much pleasure, in the first number of your Journal, an ingenious paper by Mr. West, "on the influence of the nerves over muscular contractility," and shall be glad to believe his theory correct; if Mr. W. will help me to reconcile it to the

[We have received another communication from Birmingham on this subject, which came to hand too late for insertion.—EDS.]

THE

London Medical & Surgical Journal.

London, Saturday, March 3, 1832.

WHAT HAS BECOME OF THE ASIATIC CHOLERA OF LONDON?

ALL the profession of any eminence in London, except a few dependants on that ever-to-be-remembered body, the Central Board of Health, have suddenly deserted the black banners of contagion, under which they have so long and so ingloriously fought, and have joined the ranks of their valiant opponents — the advocates of truth. Even the conductors of that consistent and spirited periodical, the *Medical Gazette*, who have been vituperating the non-alarmists for weeks and months, tracing the contagion “up the rivers and down the rivers in all countries,” have, in their last publication, abandoned their opinions; and after having strenuously diffused their poisonous doctrines as far as their limited means allowed, they now show “the white feather.” This is, at all events, prudent, for, we have, thanks to the aid of the public press, burst the Cholera Bubble, and demolished the frightful contagion of the prevailing epidemic.

Our candid contemporary, the *Lancet*, nothing daunted by the promulgation of the universal opinion of the profession, that the prevailing

disease is not Asiatic nor contagious, boldly maintains the opposite opinion, and as proof positive of the correctness of his views, which doubtless must be infallible, for it is clear the whole profession besides must be wrong; he displays his profound medical erudition, by citing Daniel De Foe’s fictitious history of the plague, as invincible evidence. We should as soon cite, as medical authority, the Adventures of Robinson Crusoe, by the same author.

We acquit the avowed editor of this piece of nonsensical extravagance; it is the work of some of those ignorant and superficially informed aspirants to editorial pretensions, who set themselves up as constellations to enlighten our profession. Do we blame them for this reference to the work in question? far from it, for we feel proud that our former recommendation of De Foe’s History of the Plague to the especial patronage of the contagionists and alarmists, has been duly appreciated. It is, in truth, an interesting, though terrific narrative, and highly exaggerated—peculiarly appropriate during the prevalence of cholera-mania. We are not surprised, therefore, that the vivid imaginations of the youthful conductors of our contemporary, should lead them to consider it a work of reference and authority. In this curious production, it stated, that at first, few cases of plague appeared in London; *ergo*, quoth our able opponents, as few cases of cho-

lera have as yet appeared, the disease must, like the former, be contagious, and must prevail to an unlimited extent. Q. E. D. This is assuredly bad logic. We need scarcely observe, that these premises and conclusions are equally false. For the satisfaction of these able writers, we beg them to remember, that according to the bills of mortality, the week after the cholera appeared in London, the number of deaths was ninety-four less than in the preceding one ; and the mortality is not greater at present than it was before the disease broke out in the metropolis. So much for Daniel De Foe's authority, and its supporters.

From all we have heard and observed of the cholera, and the disputants about it, we are still more confirmed in our own opinions :

1. That there is an aggravated form of cholera, epidemic in this country, at present.

2. That there is no proof whatever that the disease was imported, or is communicable from one person to another ; for if the converse held good, the medical attendants should be affected like all other classes of society.

3. That the disease is chiefly developed in filthy unwholesome districts, and generally among the distressed poor, whose condition was never more deplorable than at present.

4. That the disease may affect the nervous, the timid, the effeminate, or

all those whose constitutions are injured by fear, dissipation or disease.

5. That it arises from a certain constitution of the atmosphere, whose effects are increased by the circumstances already mentioned.

6. That the first impression of the disease is made on the nervous system, as evinced by the depression of the mental and corporeal powers, by the spasms and shiverings, which precede it, and that the blood becomes secondarily affected, and is speedily rendered unfit for the support of life.

7. That the indications of treatment are first to allay the disturbance of the nervous system, by full doses of opium, and to support the strength by brandy, ammonia, &c. ; to dilute the acrid matters in the bowels by copious mild drinks, and to arrest diarrhoea by the usual remedies, with full doses of opium. By these means, according to the best authorities, and according to our own personal and repeated experience, the disease is easily and generally cured. But in the congestive form, mustard emetics, the application of dry heat, by the hot air, spirit, or vapour baths, with frictions over the stomach, and along the course of the spine and lower extremities, bottles or tin vessels of warm water, being applied to the trunk and extremities, are the remedies most to be depended upon.

8. That the best means of prevention are removal, or improvement of the wants of the poor, personal and

domestic cleanliness, warm clothing, a proper supply of fuel, tranquillity of mind and temperance.

9. That all quarantine regulations are useless, in as much as this and other epidemic diseases never have been, nor never can be arrested by the ingenuity of man, until by his research he can devise some means of supporting his existence without the use of the atmosphere which surrounds him. When he can dispense with the circulation of the air which he breathes, he can then, and not until then, arrest the progress of epidemic diseases.

Medical Society of London,

Monday, February 27, 1832,

DR. BURNE, President, in the Chair.

IN consequence of the intense interest on the subject of cholera at present, and the want of accommodation in the society's apartments, the meeting took place at the London Coffee-house, and was more numerous attended than any which has hitherto taken place in the metropolis.

Mr. Proctor contended that the disease now epidemic was new, and requested to be informed by any member present, whether he had seen a similar disease before: he denied that any such disease has existed within the recollection of any member present, and considered that its fatality was the strongest proof of its being a new disease: he inquired whether any gentleman had ever seen

patients who died in the cold stage of an intermittent; and he considered the disease entirely new.

Dr. Johnson replied that he had seen a disease as fatal among the prisoners at Portsmouth many years ago, and was surprised at the declaration of the last speaker: had that gentleman been acquainted with the writings of many eminent physicians, he could not have offered such an observation. Dr. Jackson had well described such cases; and the writers on the Batavian fever had arrived at the same conclusion.

Mr. Proctor said that his remarks were applied to the cholera of this country; and though Dr. J. might have read more than he had, his observations were no answer to the question at issue.

Dr. Johnson felt astonished that any member of the society could entertain such an idea, that implicit confidence could not be placed in any but those who had seen and treated the disease: he referred to many authorities, which justified his position: he denied that the epidemic cholera was identical with the disease of India, which he had seen and treated: he alluded to the cases in St. Giles's, and was happy to add the testimony of Dr. Dill, the resident medical officer of the Fever Hospital, which clearly proved that no foreign cholera has occurred in that district.

Dr. J. had been that evening at Chelsea, where he saw a girl of seventeen years of age, who presented all the symptoms of the worst form of cholera. She had been ill for several days previously with diarrhoea, and was exposed to cold previous to the present illness: her mother, who had been confined to bed for several months with what she called rheumatism, was so distressed at the condition of her daughter, that she got out of bed to attend upon her, and was attacked precisely in the same manner: he was convinced that as the girl rallied, and evinced great

pain on pressing the abdomen, she laboured under gastro-enteritis. The brother, who went out shooting this morning, was lying in a damp cellar, apparently apoplectic; but his face was pale, there were no spasms and no signs of cholera: he mentioned those cases, as his object was truth, and he gave the contagionists the full benefit of them,

The next case he should refer to, was that of the child, aged four years and a half, who resided in James Street, Portman Square. Sir William Russel and Dr. Gregory had pronounced this a perfect specimen of Asiatic cholera, and even the royal ear was polluted with the detail of this case. Now he had gone to the parents, and had ascertained that the child had been ill for two years and a half, was sent to Ireland for change of air, returned no better, and was confined to the house for the last six months with chronic diarrhoea. On exposure to cold, he was seized with the symptoms of cholera, and died. Now would any medical practitioner in this large and highly respectable meeting present, say that this was Asiatic cholera? and such was the kind of cases said to be Indian cholera: he did not deny, that there was an epidemic cholera in this country, but certainly it was not the disease he had seen in India.

Dr. Whiting begged to ask Dr. J. whether he considered there was any difference between the disease at Sunderland, London, Poland, and Russia?

Dr. Johnson replied he could not answer that question, as he had seen the disease in all the countries mentioned, but so far as he had seen the disease in India, he was convinced there was no identity.

Mr. Wray was sorry that Dr. J. has censured the opinions and practice of others, (*No, no,*) and confined himself to the question, Was the disease new, and what was the best treatment? As a report of the debate

might be published in the *Times*, it could not fail to be injurious to professional character.

A gentleman observed with great warmth, that the reports in the *Times* were most unfair and incorrect, and totally unworthy of all credence.

Any one who was present at the meeting of the Westminster Medical Society on Saturday, must admit this fact.

Several gentlemen rose at the same time, but the cries of Dr. Burne, Dr. Burne, predominated.

Dr. Burne rose, and said that he had seen eight cases of the disease, and three dissections, and on those he formed his conclusions, though he advocated neither side of the question now so warmly contested. He had seen a vast deal of fever among the poor of this town, in hospitals, and in dispensaries, but he had never seen any thing similar to the appearances portrayed by those dying of cholera. [Here the Dr. gave a frightful picture of the patients on the approach of death.] He, therefore, did not consider the disease in any way similar to congestive typhus. He then read a detail of the autopsy of one case, which was most minutely drawn up, and narrated the appearances in other two. His inferences from these cases were, that there was intense irritation in the bowels, but not inflammation: that the immense secretion diminished the quantity of the blood in the body, and that the fluid so excreted, was highly irritating. The indications of treatment appeared to him to be, 1st, to diminish irritation in the bowels, to remove the offending cause, and to support the strength. This indication was best fulfilled by castor oil, laudanum (twenty drops), and brandy and water;—2. To dilute the secretions and to neutralize them by alkalies, as they were acid. Copious dilution was therefore necessary, and in addition, proper doses of magnesia: as the blood was likely to be deterio-

rated, he should recommend small doses of muriate of soda in the drinks, as advised by Dr. Stevens. The disease bore a close resemblance to dysenteric diarrhœa, which prevailed about two years ago, and like it was easily manageable, if treated timely.

Mr. Dendy begged to report the result of a case which he mentioned at the last meeting, and, he was happy to say, that the patient was now convalescent, and a cure effected by mercurial salivation: he related a subsequent case that proved fatal in a few hours, though the symptoms were by no means formidable.

Dr. Webster was an anti-alarmist, and saw no grounds whatever of the panic which was almost universal. He had procured a copy of the bills of mortality the week before the arrival of cholera, and found the whole deaths in the metropolis amounted to 479. After the frightful cholera had appeared, the deaths were ninety-four less. (*Hear, hear.*)

Dr. Whiting went into a long detail of his views, and maintained the disease was new. He tried various remedies, venesection, vapour-baths, hot-air baths, mustard emetics and sinapisms to the epigastrium and legs, without any benefit. He concurred with the admirable view taken by Dr. Burne.

Dr. Stewart made some observations, the substance of which will be found in our report of the Westminster Medical Society.

Mr. Costello stated that he believed cholera to be seated in the nerves of organic life, and was surprised that no remedies had been applied to the spine in this country. He also suggested the use of phosphorus as a stimulant.

Royal College of Surgeons.

INTRODUCTORY LECTURE

TO A COURSE ON THE ANATOMY AND DISEASES OF THE EYE,

Delivered in the Theatre of the College,

By G. J. GUTHRIE, Esq. F.R.S. P.R.C.S.

Professor of Anatomy & Surgery.

February 28th.

MR. PRESIDENT,

THE last time I had the honour of addressing you, I did not expect that I should have presented myself again before you in the capacity of one of the Professors of Anatomy and Surgery of this college, and that I now do so, is owing to the interruption to the lectures which then took place, and which I cannot regret, because it has led to very important results. I was prevented completing my observations on the anatomy and surgery of inguinal hernia, in the manner I could have wished. I was enabled, however, nearly to finish the anatomy; and had pointed out the two or three points on which I differ in the demonstration of those parts from other anatomists. I do not now intend to go over these grounds again, as it would be disrespectful to the learned body I address, but I shall submit my observations to the public, as soon as the plates can be got ready. It would have given me great pleasure if they had found a place in a volume, the proposition of which does great honour to those who brought it forwards some fifteen years ago; but which, I regret to say, is not carried into effect—I allude to the TRANSACTIONS OF THE ROYAL COLLEGE OF SURGEONS;—I do not mean to say that the Board of Curators have not done their duty, they have regularly called upon the surgeons of the London and the provincial hospitals; the members of the College generally, and latterly upon those of the Council, in an especial manner; but the results have not been such as to enable them to proceed with the labours, and bring forth a book, which

MR. RITCHIE, Professor of Natural Philosophy in the University of London, has been created LL.D. by the University of Aberdeen.

shall be worthy of so scientific a body as the Royal College of Surgeons. Why it is so I know not. I shall endeavour, however, to set the example of a little labour on this point, and if I should not succeed in making out something worthy of a place in such a book, I must even print it, like other literary efforts in a different branch of literature, under the head of REJECTED ADDRESSES. The interruption which took place last year, has enabled the Council to establish a right that has been disputed, and to show that they are ready to do that at all times which is right and proper, and at the same time, by their ulterior proceedings, to prove that they are afraid only to do that which would be unjust;—having established this disputed right, they were content to withdraw from all further proceedings, believing it beneath the honour and dignity of a great public body to go one step further. A degree of authority has been given to the Council from those circumstances, which they did not possess before; for it is a fact, that there is no corporate body, that has so little direct power, as one I now address; it has been reared entirely on public opinion, and those who, thirty years ago, thought it of no moment to gain those honours which this College can bestow, are now desirous of retracing their steps. It is highly desirable that this should be known, and therefore I mention it, and if the attention of the legislature were directed to this subject, as it has often been said should be done, I am satisfied the investigation would end by much more authority being given it; for that which is possessed at present is either very little or in abeyance.

There is an opinion gone forth that this Council is an irresponsible body, which is a mistake, it is quite reverse in reality. The Council of this College is responsible indirectly through public opinion, and it is directly

responsible, on all points, to the Secretary of State.

I have already contended here, Sir, that medical science depends on a knowledge of anatomy, not merely human anatomy, but that which teaches the properties and powers of all that live, or have lived. This kind of general anatomy is the rocky foundation on which the superstructures of physiology and surgery are to be raised; there is no art or science to which mankind owes so much as to that of surgery. It has removed many, and has alleviated more of the greatest ills which have befallen human nature; and it has a just right to ask in return, that the means be granted through which its investigations may be continued, and this is principally to be done by granting facilities for the study of anatomy. Upon this point I have trespassed before upon your patience, and I almost fear to do it now; but as gentlemen without are riding their cholera hobbies very hard, I will venture to claim your indulgence whilst I take a gentle canter on mine. The first Bill proposed in aid of anatomical studies, was thrown out by Parliament, and deservedly so, for it was oppressive, unjust, and impracticable; and however many there were who regretted it then, there are few, I believe, who regret it now. In asking for the aid of the legislature, it should never be forgotten, that we ask it as a right, in return for the services that medicine and surgery have rendered to mankind, and not that an opportunity may be taken in granting one favour or assistance in one way, to pull down and destroy, or even disgrace, all those institutions which have been the means of supporting and maintaining the science of anatomy and surgery for so many years, and with so much advantage. Time has rolled on, and another measure is now before Parliament, which I am sorry is sup-

ported, even in all its faults, by men of character and eminence in the profession. It is devoid, it is true, of most of the faults and errors of the former Bill, but there are many existing in it which might be altered with great advantage. It gives, or will ultimately give, the anatomist what he wishes, and it does not press on him inconveniently in any way, but it is not a safe measure for the public. It will open a door for the commission of murder, with impunity, and will bring anatomy into disrepute. It will be, at the same time, an apple of discord thrown among the members of the profession turning many a peaceful place, into one of riot and confusion, and, at least, of causing much ill-will among many very inoffensive persons.

It is directed that a person wishing to give up a body for dissection, shall call in a medical man, if no one previously attended, to declare, to the best of his belief, the cause of death, and to give a certificate, which is to be delivered with the body. Now I am addressing some of the ablest men in the profession, and they know full well, that to decide on a point of this kind, by a mere casual inspection, is impossible; that it can scarcely be done in many cases, after the most minute examination, and such a thing can only be of use as a cloak for villainy; for there can be but little difficulty in getting a medical man to give a certificate, where nothing particular appears on the body, and he has no cause of suspicion. Messrs. Bishop and Williams would have liked nothing better than such a plan of proceeding. Besides, I do not know what the term a medical man means, or why it is used.

Our profession is divided into physician, surgeon, and apothecary, and each has its respective grades, institutions, and examinations, and these are established by charters and the laws of the country. This measure throws off all these appellations, and

introduces us to a new term, or one which has been hitherto used only by the vulgar; I do not know exactly what a medical man is:—if you tell me he is a surgeon, I think I can pose you there. The President lately received a letter from a lady, whom I shall distinguish by the name of Mary Jones, and this lady calls herself a surgeon, and desires to be addressed as such, and says that her sister, and her brother Tom are also surgeons; so that if a surgeon is a medical man, this lady is also a *medical man*. (*A laugh.*) We had also here a little while ago, a tanner, leather-seller, bone-setter, &c, &c, I do not recollect what else he was, but he had six or seven occupations; now this gentleman is also a medical man, without having ever attended a lecture or an hospital, and can give his opinion as to whether a body came fairly by its death. Now all who hear me are well aware that, no one can say on the mere view of a body, whether it did or did not come fairly by its death; and the person who can decide that question, must be a well educated individual, either physician, surgeon, or apothecary. I know not why these names should not be admitted, except to offer a great disrespect to the established authorities; there could be no difficulty in identifying these practitioners, as the individual must be a member of one of the Colleges, or the Hall, or filling some public situation. If I were anxious to get rid of a body, which had come improperly by its death, I should not wish for a more convenient law; if this becomes a law, such practices will still go on, and anatomy be brought into disrepute.

I am, I believe, one of the least exclusive persons in my opinion, and in addressing you, Sir, I know that I am addressing one perhaps even less so, and yet I think, and I know you think, there will be great impropriety in allowing every student, or boy who

calls himself a student, to have a body in his possession. It will lead to evils I barely even wish to contemplate; to every degree of immorality and irreligion, and ought on no account to be permitted. It cannot be done without great danger, which will be found out I fear too late. Anatomy should only be taught in public schools, because it is not the mere dissection of a part which teaches it, but the various minute operations of injecting, drying, &c., which require certain facilities for conducting diseases, which can scarcely be procured, except in public schools, and which are maintained at a great expense. There must be a house, servants, museum, &c. requiring a certain number of students to maintain them; and they ought to be maintained in all their utility; but which will hardly be the case, if every town is to have a school of anatomy, at the pleasure of every individual who may desire to form one. Public schools of anatomy should be confined to large towns in which there are hospitals, and from which competent instruction can be acquired on other points; and to these towns students should go for the instruction, which they will not be able to obtain in smaller places. In the latter, anatomy will be said to be taught, but it will be only in name, and not in reality. It will be, however, a means of exciting jealousies and bad feeling in all these places, and of disturbing the peace and comfort of all those practitioners, who are at present little thinking of the evil which is hanging over them, and are enjoying the reward of years of labour in peace. I do not mean that these observations should apply to those private instructions in anatomy which every practitioner must wish to give to his assistants and students. I would in no way interfere with any course of the kind, but I would in no way permit of its becoming public; or of its being frequented by all sorts of visi-

tors, and to whom it will be made an object of attraction to their detriment, and the disadvantage of anatomy.

There are many other points in which this Bill might be altered with advantage, but these are almost essential to prevent its being mischievous, to prevent its having an unhappy influence on the morality and religion of the young men of the country. Upon these points, there should be restrictions; and you may ask me why I have not endeavoured, in the House of Commons, to obtain them,—the reason is, that I wished to do nothing that might hazard the loss of the Bill in that quarter. I have, on the contrary, requested several of my friends who have offered to oppose these parts of it, to abstain from doing it, believing that all these points will be much better attended to in the House of Lords.

I have, Sir, taken my canter on my own hobby, and will now proceed to the proper business of the lectures,—the anatomy, surgery, and diseases of the eye. I shall compress them as much as possible, in order to bring all the important points within the compass of the fifteen lectures allotted to me.

I am told there is at least one gentleman present, taking notes for publication. I have no objection to it, all I say is public, and any one and every one may make what use they please of what I say. If any of them who are thus occupied, think they mistake my meaning, they have only to ask me, and I will put them right. I wish that they should not mistake me, “nor aught extenuate, nor aught set down in malice.”

[The audience was exceedingly large and highly respectable; the Professor was greeted with unanimous and long continued plaudits, both at the commencement, and conclusion of the lecture, which appeared to give universal satisfaction.]

DR. SEED'S NEW REMEDY FOR
OPHTHALMIA.

IN consequence of the illegibility of the manuscript which contained this formula, a mistake was made in our second number, which we now rectify. The following is the correct formula:—

Rx Sp. Æther. Sulph. C. ʒj.
Sp. Ammon. Comp. ʒj.
Sp. Vini. Camphor, ʒj m.

This lotion is applied over the eyelids, forehead, and temples, in acute and chronic ophthalmia; and also introduced into the nostril with the end of the finger. Accident led to the discovery of this remedy. The doctor having suffered from spasm of the stomach and bowels, had used the above mixture with immediate relief; and having laboured under ophthalmia, attended with violent periodical pain, which appeared to depend on nervous irritability, he applied the remedy from analogy, and with sudden success. The usual regimen should of course be employed at the same time.

Royal College of Physicians.

Meeting, Feb. 27, 1832.

SIR HENRY HALFORD, Bart. President, in the chair.

SEVERAL of the nobility, and many literary and scientific characters were present.

A paper was read on the Plague of Athens, Marseilles, &c. the production of DR. IRKLAND, *Dean of Westminster*, of which we can take no further notice in this journal.

Provincial Hospital Reports.

BIRMINGHAM HOSPITAL.

Vicarious Hemorrhage.

ANN BUNDLEY, aged 16, was admitted into this hospital, Dec. 9th, 1831. Her countenance was chlorotic, she had pain between the shoulders, and affected by pressure, flatulence and pain in the stomach, particularly after eating. Pressure

over the stomach gave slight pain, and she complained of occasional palpitation of the heart. Her bowels were relieved every day, and her urine was pale and abundant. The catamenia commenced when she was fourteen years of age, but had been suspended for the last twelve months.

To take ʒss of castor oil, until the bowels are freely evacuated.

Four days afterwards, her symptoms were little changed, but the pain in the loins had increased, and she complained of catamenial pains.

To take ten drops of tincture of idoine in a cup of camomile tea, three times a day, and three compound aloetic pills at bed time occasionally.

In the evening, she had a discharge of blood from the stomach, and on the following day was much better. She now said she had had such a discharge periodically for the last three months, preceded by catamenial pains and followed by relief.

To use the shower bath every morning.

Her general health improved, and by the beginning of January, the pain between her shoulders, and the palpitation at the heart were quite gone.

To use the hip bath every day, and continue the iodine.

On the 10th, she left the hospital at her own request; her health was improved, but her countenance was still colorotic, and the catamenia had not appeared.

In this case the vacarious discharge mitigated the symptoms, but did not entirely supply the place of the catamenia.

Copy of the Petition, signed by Seventy-three Medical Men, and presented to the House of Commons by Col. Evans, on Thursday, the 23rd February.

THE humble petition of the undersigned Physicians and Surgeons residing in London, Sheweth—That we feel it to be our duty, respectfully to approach your Honourable House,

to pray that an inquiry may be instituted for the purpose of ascertaining the nature and mode of propagation of a disease, said to be now in this country, and which, at present, causes so much alarm in the public mind,

To the Editors of the Medical and Surgical Journal.

GENTLEMEN,

As considerable misapprehension exists in the profession, as well as in the public mind, regarding the prayer of the petition to the House of Commons, it is but due to the gentlemen who signed the same, that the facts of the case should be made known; and you will therefore oblige the petitioners by inserting the above in your next number. It should also be remembered that, on this occasion, the important announcement was made by Government, that all internal quarantine should henceforth be discontinued; shewing one good effect, at least, of petitioning.

ONE OF THE PETITIONERS.

28th February, 1832.

[The object of the petitioners was to ask for a new inquiry, and nothing more.—Eds.]

Hunterian Oration.

To the Editors of the Medical and Surgical Journal.

BEING a Member of the College of Surgeons, I was very much surprised on reading the account of the Hunterian Oration in the *Medical and Surgical Journal*; I thought that the members were entitled to have a ticket sent them, informing them of the day of lecture and the lecturer, by the secretary, or if too much trouble to that gentleman, he could depute the beadle to send them; at all events, whether as a matter of right or courtesy, I think it is the

least that could be done to the members in and about London. Trusting to your independent principle for the insertion of the above, I remain, Gentlemen,

Your very obedient Servant
MEDICUS.

Monday Feb. 20th, 1832.

Temperance Societies.—We are happy to observe the names of many eminent members of our profession among the supporters of temperance societies. In order to prove the necessity there is for discouraging intemperance, we have merely to state, that during the last four weeks no less than 4070 drunken persons were taken to the police stations in the metropolis!

MARY-LE-BONE DISPENSARY,
WELBECK STREET, CAVENDISH SQUARE.

Use of Aniseeds.—Dr. James Bartlett, of the Mary-le-bone dispensary, has lately given an extensive trial to aniseed, in various affections of the chest, as chronic catarrh, cough, asthma, &c.; and with great benefit; he directs it to be smoked two or three times a day, and sometimes in the night, more especially for asthma. We have seen several cases in which it appeared to have done good. Dr. Bartlett attributes the good effects of the aniseed to its assisting the expectoration of mucus, and unloading the vessels. One of the patients we had the pleasure of seeing, said that the smoking made her spit a great deal.

See wrapper, p. 2, for List of Books, Notices to correspondents, &c.

SINCE our observations on cholera were written, the quarantine regulations are removed, as appears by a proclamation in Tuesday's Gazette. We opine the Central Board of Health will be henceforth disbanded, and we trust, "we shall never look upon their like again."

London Medical and Surgical Journal.

No. 6.

SATURDAY, MARCH 10, 1832.

VOL. I.

King's College.

SELECTIONS
FROM THE
SURGICAL LECTURES.

Delivered

By J. H. GREEN, Esq. F. R. S.

In the Session 1831—32.

Injuries of the Brain.

MR. GREEN observed, that in the treatment of inflammation of the brain, or any of its membranes, the chief expedient to be relied on was blood-letting. Keeping the bowels open formed another important measure; for if ordinarily the suspension of the natural evacuations was attended with head-ache, how much more likely was the same cause to produce the same effect, when the head was already affected. "In cases of inflammation of the membranes of the brain," observed Mr. Green, "the exhibition of tartarized antimony has been resorted to with great effect, for it has a very powerful influence in keeping down the pulse. Mercury has been proposed and employed in these sort of cases. I cannot say that in my own experience, any instance of its successful use has occurred, and therefore merely suggest it as being recommended by others. With respect to tartarized antimony, I can speak with more decision, having witnessed the very beneficial consequences resulting from its employment."

When matter was formed within the skull, the necessity for the use of the trephine was immediately indicated. But it should be remembered that it was only when the matter was formed between the dura mater and the skull, that the operation could be expected to afford relief, and even then there was no

certainly that the discharge would cure the patient. If such evidence could be obtained as was presented in the case of the child wounded by the beak of a cock, as to the situation of the matter, there would be no harm in enlarging the opening to let out the matter; but beyond this the surgeon was not entitled to go, for he could not ascertain where the matter was formed. It was all very well to put down in books directions for giving an exit to the matter; but such directions were idle, for the surgeon could not go hunting about for abscesses in the brain. All the good which trephining generally could accomplish when abscesses were formed within the skull, he contended, was confined to those cases where the matter was formed between the dura mater and the skull.

Besides the immediate symptoms of the formation of matter in the head, there were also remote symptoms attendant upon it, which deserved their attention. There was, for instance, sometimes a curious state of the senses, such as strabismus, dimness of sight, seeing objects in wrong places, seeing only half of an object, or seeing the whole object completely distorted. Again, deafness was one of those remote symptoms, with sometimes head-ache, vertigo, giddiness, loss of power of the voluntary muscles, and paralysis of the limbs, with great weakness. Loss of memory was occasionally observed in such patients; some had been known to be incapable of recollecting the names of individuals whose persons were still as familiar to their eyes as ever; others had been heard to mistake words, so as to use quite a different phrase from that which they must have known to be the proper one. "There are instances, indeed," continued Mr. Green, "where a whole class of words, nay, a language, was completely obliterated from a man's memory. I remember seeing a patient in St. Thomas's Hospital, who had an injury of the head. During his illness he began suddenly to speak in a language which nobody in the ward could understand. Very fortunately, in one of the most voluble mo-

ments of this patient, the milkman of the hospital was passing through the ward, and listening to the sick man, instantly recognized the Welch language—(*A laugh.*) A freer communication immediately took place between the parties; and it appeared, according to the account delivered to the milkman, that the patient understood and spoke English very well, but that, in consequence of the accident, that language had been fairly knocked out of his head”—(*Laughter.*)

The cause of such symptoms as he had described was a subject of deep interest with the surgeon, in order to ascertain the means of effecting a cure. He had no hesitation in saying that this cause arose from a peculiar irritability of the system, and that it was chiefly connected with the circulation of the brain. Hence, persons with any tendency to such a disorder, were utterly incapable of taking stimulants with impunity; and all those cases of violent conduct on the part of soldiers and sailors, which were occasionally described in newspaper paragraphs, might be traced in general to the effect of ardent spirits on constitutions in which an excessive irritability, from some cause or another, existed. This was the ground upon which the defence of Hatfield, the maniac who shot at George the Third, was founded. He (Mr. Green) remembered a case that was under Dr. Wells, in the hospital. A man was admitted, in order to be treated for epileptic fits. Dr. Wells carefully examined the cranium, and finding great tenderness in a particular part, which had received the blow of a sledge hammer, he had the skull trephined. An epileptic fit came on, but the man ultimately got well. The cause of his disorder was the pressure of a spur of bone, which projected into the dura mater, producing all the consequences described.

Injuries of the Spinal Chord.—Mr. Green complained that injuries to the spinal chord had not received that attention from surgeons which their great importance demanded. The spinal chord was liable to very nearly the same injuries as the brain—concussion, compression, inflammation, and all its consequences.

Fractures of the spinous process of the vertebræ were not very uncommon, and were liable to be accompanied by concussion of the medulla, or extravasation in its canal. These were results carefully to be kept in recollection by the surgeon, with the view of promptly meeting the symptoms of the case. The more important fractures of the vertebræ were, the transverse fractures of their bodies, which, however were far from being common. It was impossible to examine the mechanism of the vertebral column, and the provisions which it was prepared to answer, without being struck with the admirable perfection which nature had attained in combining strength with mobility in its structure. Such

protection was afforded to the parts within the canal, formed by the vertebræ, as rendered it liable to injury only in consequence of extraordinary violence. Hence the falling of some exceedingly heavy weight, a gravel bank, or a beam descending on the neck, or some force sufficient to bend the spine into an unnatural shape, was necessary in order to produce that severe fracture of which he spoke.

The injury to the bone, however, was the least important part of the accident, since it was usually accompanied by either concussion, or compression of the spinal chord; and so important was the integrity of this substance to life and motion, that all the risk incurred by the patient, depended on the circumstance of its having experienced either of the above accidents. The indications of such an occurrence were usually loss of sensation, and of voluntary motion, paralysis of the bladder, sphincter ani; and, indeed, of all those muscles whose supply of nervous influence was derived from that portion of the spinal chord which was seated inferiorly to the point where the injury was inflicted.

The appearances on dissection, in such cases as the Lecturer was now relating, differed very much. It was, however, an invariable circumstance in transverse fractures of the vertebræ, that the upper portion of the bone should be thrown forward, whilst the lower one appeared to recede. Mr. Green exhibited some excellent specimens of this fracture.

Not only were concussion and compression, results likely to take place upon the occurrence of such an accident, as the transverse fracture of the bodies of the vertebræ, but the spinal chord might be lacerated or bruised, or even torn across by some penetrating instrument, which might be carried through the inter-articular substance of the bones. The strength of the dura mater, surrounding the medulla spinalis, was very considerable, so much so indeed, as that in the accident just alluded to of laceration or bruise of the spinal chord, this membrane yielded to the force, and being pushed into the medulla, generally escaped injury.

The difference in the results of injuries to the several portions of the spinal chord, was very considerable. Injury to the upper part of the chord, or that portion of it which lay above the origin of the phrenic nerve, and which corresponded with the extent of the three first cervical vertebræ, produced almost instant death. There were cases on record, to illustrate the truth of this statement. A female in one of the foul wards of St. Thomas's Hospital, had undergone a course of mercury. One day she was sitting up in bed, about to take some broth, when suddenly her head was observed to sink, and assistance being immediately brought, life was found to be extinct. On a post mortem examination, the

odontoid process of the second cervical vertebra or axis, was found to have been destroyed by caries, ulceration, and absorption, so as to admit of that degree of compression of the spinal chord, which proved fatal to the patient. The sudden death in this, as in all other similar cases, resulted from the complete interruption, which was put to the power of the phrenic nerve, so that the diaphragm to which it proceeds from the third and fourth cervical nerves, could not by possibility continue its usual indispensable action in the process of respiration. Mr. Copland, he said, had a case similar to this in a male. As long as no displacement of the vertebræ took place, so as to produce compression, so long the patient lived. His (Mr. G.'s) uncle, Mr. Cline, had a case under his care of a child, of three years of age, who had a severe blow on the neck. After the injury, there were no appearances for some time to justify the belief, that any serious injury had resulted, for the child survived the blow. An odd symptom was observed in this case. The child, young as it was, seemed remarkably cautious as to the mode of carrying its head. The care which he took with respect to it when in motion, was exactly that which an old and experienced person would adopt. He would place his hands on both sides; he would look down, and then afford all the support that was necessary for the due position of the head. If another child approached him incautiously, he grew alarmed, and would rest his head until he had completely recovered his self-possession. This child lived for a year after the injury, and, upon examination, it was found that there was a transverse fracture through the atlas, without, however, any displacement; but the accident so entirely weakened the attachment of that bone to the odontoid process, that there was always a danger of the barrier giving way. This event occurred after a year, and a fatal compression was the consequence.

dwelt upon the light which this case threw upon the yet disputed question, respecting the cuticular covering of mucous membranes; and I considered the present case as triumphantly proving the non-existence of any such covering to the more internal membranes; there are yet some interesting circumstances connected with this case, which the time allotted for a lecture would not allow of my entering upon, and to which I now invite your attention. The first to which I now wish to advert, is the opportunity which such cases as the present afford for the more accurate investigation of the efficacy of remedial means, in counteracting and controlling any peculiar diathesis, which may influence, though urinary secretions, in rendering such secretions acid or alkaline, or of mere neutral qualities. Again, such cases afford us the greatest facilities, in ascertaining the influence which various articles of diet may produce on these secretions, and in determining the length of time required to produce such effects, from the time of taking such substances into the stomach.

When this patient was formerly under my care, she was young, and entertained an insuperable dislike to medicine of all kinds. Still I prevailed on her to allow me to make some perfectly innocent experiments on this subject, and the results were very interesting. I regret, that I have mislaid the particulars, but I well remember that turpentine affected. The odour of the urine is $4\frac{1}{2}$ minutes, asparagus in $8\frac{1}{2}$, which latter substance must have been digested, and gone the whole round of the circulation in that time. Some other medicines and articles of diet, were tried at that time, and I now propose, during the period that will be required, to construct a proper apparatus, to subject her to some perfectly harmless experiments, with reference to the best agents, for effecting changes from the acid to the alkaline state and *vice versa*.

In addition to the interesting opportunity, thus afforded for natural, physiological and pathological inquiries, this case is deserving attention, as illustrative of the manner in which the deviation from a natural structure, in one part may effect the development of the neighbouring parts, as the want of bony support from the pubis, is accompanied with want of part of the bladder, and more or less deviation from nature in the sexual organs.

I have stated that this is a rare case, in saying which, I would beg to be understood with reference only to the sex. This is the only instance I have witnessed in a female, although I have seen several males. In looking for authorities on this subject, I find only eight recorded instances of similar malformation in females; whilst no less than sixty cases of males are related by different authors.

St. Bartholomew's Hospital.

CLINICAL LECTURE,

Delivered by

HENRY EARLE, Esq. F. R. S.

Case of Congenital Malformation of the Bladder in a Female.

GENTLEMEN,

I LAST week called your attention to a remarkable case of malformation in a female, in Sitwell's ward. I then more particularly

The cases which have been more recently recorded, are to be found in the following works:—1. Mr. Coates published a case in 1st number of *Edin. Med. & Surg. Jour.* p. 43. Sir A. Cooper, in the 2nd number of the same vol. p. 129. Before these were published, a case is quoted from Van Horne, by Bartholinus. 2. Ruysch, has described a case. 3. Mr. Bonneter in *Philosoph. Trans.* number 379; this female was impregnated, and bore a child at her full period. 4. Dr. Wm. Nevel, in whose case the umbilicus was natural and uretus greatly enlarged. The child lived only three months. 5. Mt. Penchennati. 6. Mr. Bamen. There are certain deviations from natural structure which are common to both sexes and as might be expected, others which are peculiar to the sex. In all the recorded instances in both sexes, there has been uniformly a want of union between the ossa pubes, which have been separated to a greater or less extent, and to which primary defect, therefore it is fair to refer the other deviations.

The other points of resemblance in both sexes, are the absence of urethra. The enlargement of the ureters, which become more muscular, and serve in some cases as reservoirs; and lastly, the entrance of the umbilical cord immediately in the hypogastric region above the bladder. The only recorded instance I have met with, as different from the above general position, is the case of Mr. Coates, in which the ossa pubis were united at the symphysis, the meatus urinarius was pervious for half an inch, running over the pubes and terminating in a cul de sac—there was no clitoris, and the vagina was impervious. The circumstances of dissimilarity between the sexes, have reference more to the sexual than the urinary organs.

Thus in the female the uterus, ovaries and vagina uniformly exist, although the latter is sometimes closed, and is always shorter than the natural; still we have one recorded case, where the female bore a child, and in the present case, I should have no doubt of the possibility of such an event, if the vagina were opened, as nature appears evidently to have paved the way for such an occurrence, in the extraordinary development. I have already named to you the aberration from natural structure in the male, in addition to the deficiency of bladder and symphysis pubis is principally evident in the pelvis, which is very short, broad at its root, and often bifid, without any prepuce, and without any urethra. In other cases there is an open groove like the urethra in the turtle, on the upper surface of the pelvis, with a vascular lining and lacuna, at the base of which there is a fossa navicularis and caput gallinæ, with the termination of the vesiculæ seminales. The testes are generally natural, though much separated, and in separate pouches of integument with a smooth inter-

val between, giving the appearance which which has been often taken for hermaphroditism. The vasa deferentia terminate differently, sometimes between the root of the penis, and the vascular tumour, sometimes in the urethra, at others in perineo, and in some rare cases in the rectum. In one recorded case, they were impervious. The sexual appetite exists in many cases, but there is no power of procreating; in this respect, the male is more unfortunately circumstanced than the female, the anus in the male is unnaturally forward; but is generally perfect, except in a case described by Bartholinus, when a patient lived forty years, and vomited all his excrement. In Littré's case, there was no cæcum, colon or rectum, and the ilium terminated in a pouch from which a narrow tube passed to the anus.

Dr. Duncan entertains the following hypothesis respecting mal-formation of the bladder, founded on the supposition of the primary cause being an impervious state of the urethra:—

“As soon as the urine begins to be secreted, it will accumulate in the bladder, and distend it, as well as the ureters and kidneys. In the adult, ischuria proves fatal in a short time, both from the rigidity of the containing parts preventing them from yielding to the distending pressure; and from the re-absorption of an excrementitious matter highly deleterious to animal life. In the early fœtus, however, circumstances are extremely different. In it the urine can contain very little, if any excrementitious matter; and the whole containing parts are soft and plastic, the bones scarcely cartilaginous, and nowhere meet together. The bones of the pubes, therefore, yield to the distending pressure, and are separated gradually from each other, until they become so firm that it has no longer any effect upon them. But by the separation of the bones of the pubes, the recti muscles are also separated, and the bladder is deprived of its natural support at the anterior portion; while below, behind, and above, it is supported by the bones of the pelvis and spine; and various firm viscera. The whole distending force will therefore act on the anterior portion, which, with the skin, will be protruded forward; and, becoming thinner, will at last give way, and burst outwardly. The bladder being no longer able to contain any urine, will contract, and by the pressure of the abdominal viscera, will be protruded through the ruptured aperture. Thus, in addition to an impervious urethra, we shall find the bones of the pubis separated, the ureters opening externally through a ruptured and inverted urinary bladder, and the ureters and kidneys very much enlarged, which are all the essential circumstances of the malformation.” This hypothesis is ingenious, but wholly untenable, as it presupposes the secretion of urine to take place

at an early period of the existence of the fœtus ; and even should this explanation be correct, it does not explain why, when the bladder had given way, the ossa pubis did not approximate, and unite in a symphysis : the enlarged state of the ureters is rather referable to the efforts of nature to supply the deficiency in the bladder. Mr. Coates's case is a direct contradiction to Dr. Duncan's theory.

At the conclusion of his observations on this interesting case of malformation, Mr. Earle called the attention of the class to a case of hæmatocele on which he had operated on the preceding Saturday, in a manner not hitherto practised, and which will deserve a separate description ; and also four other cases on which he had operated on the same day, particularly one of a female with two tumours in the right breast, one a large hydatid in the substance of the pectoral muscle ; the other an indolent mammary tumour, including a portion of the mammary gland ; the other cases were amputation of the leg for extensive ulceration of the cartilage of the ankle-joint, a child with hare lip, and a congenital deformity of the two ankles ; and the other a male child, with a nœvus on the forehead, and a very peculiar malformation of the genital organs, with penis situated in perinæo directed backwards, so as to make the child retro-mingent, if the urethra had been perfect ; this, however, terminated with an open orifice in perineo.

ON MEDICAL ETHICS.

By ALEXANDER THOMSON, M.B.

No learning is too profound, no literary elegance and refinement too ornamental, no vigour, power, activity of thought, too great ; there is no closeness of reasoning or accuracy of investigation, that will not be pardoned ; no mental or corporeal elegance that will be considered ill-placed, repulsive, or extravagant, in a medical man, save the wild and wayward vacillation of study, the irresistible and torrent-like passion, that converts all that it touches into nectar, or into gall ; save the irregularity of customs and habits, the negligée of demeanour and attire, the abstraction and confusion of thought, which are the invariable attendants, as well as some of the chief ornaments of towering and exclusive genius. The fire of the poet, the pathetic tenderness of the romancer, the invention of the novelist, the cunning and casuistry of the lawyer, the enthusiastic bigotry of the churchman, the soul-warping ambition of the statesman, will all be misplaced. One and all they rouse, excite, dis-

tract, and sometimes even phrenzy the mind ! They frighten, at times, reason from her propriety, and satiate and render the heart of the man enduring them, indifferent to the commoner feelings, the ordinary thoughts of every day life. It is with these feelings, these petty alternations of pain and pleasure, or rather of uneasiness with ease, that the medical man has to do. The aching tooth, the fretted ulcer, the tickling cough, the sniffling rheum, the halting step, the blackening bruise, the palpitating heart, the palsied limb, the dribbling water, the constipated bowels—these are the unromantic things which lead his active senses and busy thought to find out which of the wheels and springs of life is worn, rusted, strained, or broken. To seize at a glance, discover by a hint, infer from a groan, the state of hidden parts, of internal and delicate structure ; to compare rapidly, and yet methodically, the state apparent, and described, of every organ and function in his patient ; to infer the amount of present damage, the facilities of repair, the prospect of the further duration of the machine placed in his hands, is his care. Upon his determination, upon his response, demanded with painful and half reluctant eagerness by the tender, loving wife, or affectionate and devoted child, depends often the very framework of society, one link of which is broken or strained, and lies within his workshop for repair ; invariably the comfort, tranquillity, and domestic happiness, and in nine cases out of ten, the very hopes of the daily bread of the family to which his patient belongs. If then his heart be not callous, indifferent, blighted, or seared, by morbid excitement, or a feverish, restless, and absorbing search for fame—if it feel with the fresh bound of youth and nature—if it transfer rapidly, readily, and vividly, the pain of the sufferer to his own mind, he will find an object before him to himself of high and vast importance, entirely sufficient to absorb his powers, to snatch them from the seductions of fancy, and the dreams of perspective and unalloyed happiness that stimulate ordinary men along the dance of life, an object no less than that of removing the pain that frets his sympathy, that summons up his knowledge from its depositaries, agitating him with thought that renders him day and night restless, speculative, and conjecturing, till it be removed ; and a reward in the sympathetic pleasure and joy which he may feel, as the hollow eye begins to turn in confidence on his, the haggard lip to smile in gratitude, the features to resume their intelligence, the mind and body once more to be free in their mutual play, and the human automaton usefully and silently to glide through its sphere of duty. Add to this native pleasure the fervid thanks, the sparkling eyes, the close-pressed hands, the deep respect, the silent awe, the tear of exulting friendship and overpowering happiness, which

meet him when successful in his labours, as he talks over the danger from which his patient has escaped, and restores him, as it were, to health, life, and a grateful family, eagerly seeking to remunerate him for his kindness; to assist him not only towards a comfortable maintenance, but a noble and honourable independence! What more can a man thinking naturally, and feeling unsophisticatedly, wish or desire? Wherever he goes, if he be honest and kind, he scatters, at least, tranquillity, generally pleasure, often happiness, and sometimes bliss; he may, if he will, calm the afflicted and widowed heart, the orphaned hope, the sigh of anguish, and the tear of contrition; he is, as it were, the god of his sphere, or rather the minister of that mighty Being, dispensing his blessings with the whole resources of a generous, enlightened, manly, and contented heart. Such are the objects of a medical man's life; such the high, soul-filling vocation to which his juvenile love of science, and of the observation of natural phenomena, may, if fairly directed, and zealously cultivated, conduct him. But for the reflective happiness which he may gather from the joy and tranquillity he scatters around his flowery path, he must labour severely, constantly, assiduously, conscientiously—nay, more, he must cultivate every natural feeling of his heart, in order that he may be capable of deriving pleasure from his powers to restore and to tranquilize the health and spirits of his patients; that he may be able to find a never-failing source of excitement and satisfaction, in discovering, observing, and developing, bit by bit, the complicated structure of the animal machine, and its product, or transmitted light, the mind, or the faculties, feelings, propensities, passions, and powers of thought and memory. The mere pleasure derivable from the possession of knowledge, or from the research after it, is trifling and evanescent, nay, may rather be called a pain, an arduous labour, a tedious research, provided it be not followed by respect and deference, or the hope of these, on the part of those, who surround, employ, love, or depend upon us. You must have felt this in the earliest labours of childhood, as in the subsequent and more elevated thoughts and reflections of youth. In fact, the very acquisition of knowledge demands time, calmness, retirement, freedom from passion, and a power of yielding all these, without injuring the health, or debilitating the corporeal frame, and thus adding an additional burden to the labour and self-denial demanded by study. The din, therefore, of society, the debates of would-be politicians, the social pleasures of the board, the song, the dance, the smile, and the caress of beauty, the chase, the bottle-companion, the theatres, must all be used rather as recreations than pursuits, if not entirely abandoned, by the youth who would gain respect as a medi-

cal man; because they pre-occupy his thoughts, depriving him of the tranquillity necessary for close application, and engender, at the same time, a restless and feverish state of body, totally at variance with the confinement and sedentary habits required in following up any definite, close, and lengthened research.

In return for these sacrifices, which are imaginary indeed, if the stoic insists upon it, but still, sacrifices requiring no common effort on the part of youth living in the heart of a metropolis, through whose atmosphere the boisterous sounds of pleasure peal loud enough to drown the groans of pain, the sigh of anguish, the howl of despair, that crowd neglected round the very skirts of its palaces; I say, in return for these sacrifices, for these mortifications, something must be hoped for, something must be expected, for human nature puts itself in motion but for some end, be it good or bad; and that something, is respect and reverence, not a cold and indefinite politeness and tolerance in society, but such respect and reverence as will allow the minds of your patients to rely upon you with implicit confidence, to aid to the utmost your exertions, by their obedience to your suggestions; as will willingly accord you all that you demand for your attendance, and not think you too well paid; and as will render you capable, even when your independence is accomplished, of enjoying the same, and passing smoothly along your course to the very bourne of life. Independence and tranquillity in old age are then your definite objects; for if you do not already know, you will soon find out, that perpetual, or even greater happiness than you now enjoy, cannot, under any circumstances, be yours. If you cultivate your powers of reason and reflection, indeed, you may gain a more delicate state of mind, and a body proportionally susceptible, so that what in the present state of society are considered higher, and more polished sources or objects, may give you pleasure more delicate, more exquisite, if you will—yet never forget what Hume in vain endeavoured to impress upon his readers—that your pains, your uneasiness, your miseries, will be more exquisite, will arise from more trifling, or more mental causes, in a direct ratio with your increased susceptibility for delicate, refined, and elevated mental enjoyments. Do not forget that if you float in the mazy dream, the woe-lulling influence of champagne in the evening, you must endure the sermons and soda-water in the morning. In fact, a balance of pleasure and pain, equal, or nearly so, in the period of consciousness they employ; a constant contrast of one with the other, by which their qualities may be kept distinct; an invariable succession of one upon the other, as invariable as the swell and fall of ocean's wave, is the law of animated existence, the

necessary spring of action in an animal made to administer to its own wants, the objects of which are scattered far and wide over his den—the world.

Cease then to nourish the false doctrine, the product of a dark and unthinking age, that any circumstances of character, or conduct, or exertion, can free you from these laws of the human machine, can procure for you a perpetual, or a more enduring happiness than you now enjoy. Perpetual happiness would indeed obliterate the consciousness even of the lapse of time, of which pain, or uneasiness, is the natural clock, would then destroy the consciousness of its own duration, and leave, from the want of stimulus to remove obstacles to its duration, from the absence indeed of pain, and uneasiness, its endurer as inactive as the brute mass of matter on which he treads. If this be true, if perpetual happiness be a dream, which has been excited by the poetical opiate of your education, and that it is, most men come sooner or later to be convinced, independence and tranquillity for old age, are objects well worthy of every struggle that can be made by youthful prowess, of every sacrifice that may be made by youthful passion,—but they are objects which require these exertions, these self-denials, because they flow only from deep and unsullied reverence, and respect: you have perhaps scarcely looked abroad sufficiently over society, to understand the difficulty of procuring respect, the nice balance held and watched with a hundred eyes, even by the most abandoned character, before he yields that homage of the mind to the object that claims it. It is all that the human mind can yield to its fellow man, save an abandonment of its integrity; it leaps over the ordinary obstacles to intercourse, breaks through the artificial boundaries of rank in society, scatters before it, as does the rising sun, the clouds of the morning, pride, reserve, coldness, and indifference, and stripping the mind that yields it of its mask and holiday trappings, of its trammels and its prejudices, brings it down to the side of that of the person to whom it is yielded, and admits his perfect equality in power, if not in acquirement, establishing as it were an interior, mental and rational republic in the soul. Hence it is that you see men, who understand how to gain the respect of mankind, mount steadily and regularly up the steps of fortune, little dashed by untoward circumstances, and never deviating from the straightforward course. Hence it is that you so often meet, even in our profession, with men arrogating to themselves all the qualities, which really possessed, silently command respect, and masking their vices, their meanness, their vulgarity, with an adroit hypocrisy, a cunning and subtle government of manner, feature, and sentiment. But while they thus pay a deep and profound homage to the value of the qualities which they simulate, think not that the

burden which they roll up the hill of life is light. On the contrary, it continually increases as they ascend, requiring ten times more force, energy, and application of mental power to sustain it, than is required by the simple, unsimulated, unsophisticated modes of life and thought, which mankind approve, and moralists call virtue, and even after all, in ninety-nine cases out of a hundred, rolls back upon them, like the inexorable stone of the overwrought Sisyphus, hurling them by its precipitate momentum into an abyss of the most dreadful misery. In a path then which leads to honour as well as wealth, to comfort as well as ease, to a commanding station among men, as well as to a moderate rank in society, to be often the counsellor even of kings, as well as their comforter and companion, you cannot hope to tread alone, without competitors, without rivals, without enemies! The ends that you have in view are valued by all, sought by all, struggled after, and sometimes even clutched at by all? You will find yourself then jostled by the eager, pursued by the cautious, thwarted by the cunning, and eagerly and intently watched by all! You place yourself in the midst of the athletic, in the arena of distinction, in the very focus of men's observation, and therefore lay yourself open to have every, even the most minute act, motion, and change of feature, watched by the intent gazer, by the jealous competitor, by the envious rival. You must indeed be credulous, if you believe that beneath such scrutiny, your faults, foibles, and imperfections, professional, intellectual or moral, can escape observation. On the contrary, make but one false step, and you will find that you have slipped back, lost your standing, and been outdone by rivals, more on the alert, more watchful, and what is most galling of all to the ingenuous soul, less deserving, and more successfully cunning and adroit. To become then progressive, to baffle the cunning without painful labour, to thwart the jealous, without turning his feelings into rancorous enmity, to convert the enemy into the friend, to command and retain the esteem and homage of all men, you must be watchful, you must have all your thoughts and feelings in their right place, in order that you may not be distracted from your watch in re-arranging, hiding or repressing them; you must have your whole body reduced into a proper vehicle for your thoughts, you must have your "*bundle of habits*," as Paley ingeniously calls the man, so well packed and arranged as to be carried with the most convenience and elegance. And how can you do this! how can you subject the body invariably to act suitably to the occasion, if the feelings pulse not upon the nerves naturally and without constant intention of the thought. You cannot always walk upon stilts; you cannot always play the harlequin. You must, like Kean, Liston, Talma, and Kemble, have your moments of exhaustion,

when the tinsel and tone of the actor alike vanish and display the man. But you cannot, like them, retire into your closet and hide these moral syncopes, these blood-strokes of the soul from your admirers, your friends, your patients. Yours is a character in which there are no changes, no exits, no entrances, no prompters, no distance to soften down the asperities of your mental attire. You must be, or may be, if in full practice, invariably exciting attention, and as invariably demanding applause, and therefore submitting to, if not courting, scrutiny. In fact, you must be a moral man, you must have a good private character, you must not dally with or commit adultery with your patient's wife, and least of all with that of your bosom friend; you must not waste your nights and the means of supporting your family at the gaming table—you must not frequent the back slums of the theatre, nor the notorious stews of the metropolis—you must not direct the energies of your youthful soul, in the plenitude of its acquirement, to ridicule and mock the religious convictions or prejudices of your country.

Neither must you insidiously sap the character and life of your contemporaries in some foul journal, and then refuse to acknowledge your detestable work—you must not enter into combinations to repress the rising energies of young and industrious men, poisoning, both mental and bodily—you must shun, as you would recommend your patient to avoid the plague—you must assist no man to deceive society and sap its foundations, by destroying his offspring in the womb; in fact, you must not brutify and drown your feelings, nor wither your memory, nor shake your reason, nor interrupt your presence of mind, by these or any one of these vices which blacken and very much degrade the medical biography of our country during the last fifty years, and which are, even in the present day, each distinguished by some well known name; nay, you must not even drown your sorrow, your woe, your chagrin, in the wine cup, nor once taste, throughout your whole career, of the waters of Lethe, from whichever part of the oblivious stream they may be drawn, but you must

Esto bonus miles, tutor bonus arbiter
idem

Incertæque rei siquando citabere testis,
Admoto licet Phalaris dictet perjuriam
tauro,

Eheu, summum crede nefas animum
præferre pudori

Et propter vitam, vivendi perdere
causas.

You must, to complete your character of a respectable medical man, cultivate in your THOUGHTS the power of abstracting your attention from all subjects but that imme-

diately under investigation, and readiness to investigate and re-investigate upon the occurrence of the slightest doubt—to recur for its solution either to books or men—to leave no stone unturned until the mind be satisfied of the nature of the malady—and in the event of the impossibility of arriving at this result, to give up the case to some other abler individual. In your FEELINGS, earnest desire of truth, calmness, patience, kindness, delicacy, compassion, fear of needlessly or recklessly injuring feeling, and consciousness of superiority over your patient in intellectual acquirement alone; in your SOCIAL RELATIONS with your patients, willingness to oblige, advise, consult, and sympathise with misfortune, moderate familiarity, invariable kindness, scrupulous courtesy, and freedom from all contempt, personal or intellectual; in your DEMEANOUR a cheerful countenance, a calm eye, an attentive ear, an easy, tranquil, and dignified, but not pompous gait, a ready, pliable, delicate and tender, but sure hand; in your MANNERS, decorum, moderate reserve, gravity, self-possession, and urbanity; in your DRESS, cleanliness, neatness, and compactness, if not elegance; in your LANGUAGE, decency, simplicity, clearness, and slowness, with fluency of enunciation; in your TREATMENT, vigour, tempered with caution, or rather discretion; activity in observing the operation of medicine and the results of operations, and readiness to supply, personally, accidental deficiencies arising from circumstances of torture, in the way of administering remedies, dressing wounds, and presenting food to your patients!!!

Let your motto be,

Nil humani alienum a me puto.

Paris, 6. rue des Mathurins,
St. Jacques.

London University.—At the annual meeting of the proprietors, &c. of this institution, which took place since our last; the statements of affairs was somewhat more satisfactory than on late occasions. The capital amounts to £164,852. including £2,377. of donations, of which £157,398. has been actually received. The number of medical students at present attending the University, is 226; the number of books in the library is 10,310, and there is a Senatus Academicus to be formed, for enforcing discipline.

University of London.

VARICOSE VEINS.

FROM THE LECTURE DELIVERED BY
PROFESSOR COOPER,
February 15, 1832.

GENTLEMEN,

Varicose veins or *varices*, as they are termed, are attended with more diversity, than is generally explained by writers and lectures. A *varix* is commonly described as consisting in a dilatation and thickening of a vein, which becomes at the same time elongated, so as to constitute a tortuous, knotty swelling; but the fact is, the coat of a varicose vein may be either not changed in point of thickness, or they may be thicker or thinner than natural.

Andral specifies the following varieties of the disease:—

1. One is a simple dilatation of the veins, without any other alteration, and either extending all along the vessels, or confined to particular points of them. This first kind of dilatation of veins usually accompanies the chronic inflammation of any organ; but sometimes it continues after such chronic inflammation has been subdued, and, occasionally it is quite unconnected with any affection of the capillary vessels at all.

2. Another dilatation of veins is attended with a thinner state of their coats, and it may either be an uniform, or an irregular dilatation.

3. The third variety is the uniform dilatation, with thickening of the veins.

4. A fourth variety consists in dilatation of the veins, with thickening of their coats, and interspaces between the varicose enlargements. In the two last cases, as the vessel increases in diameter, it also becomes lengthened and tortuous. This is the ordinary form of varices.

5. In a fifth variety of varix, septa, or partitions are formed in the vein, whereby its cavity is divided into small cells or cavities, in which the blood accumulates and coagulates.

6. In the last form of varix, described by Andral from careful dissections, there are, in addition to the disposition exhibited in the fifth case, various irregular perforations in the sides of the vein; the vessel thus communicating with the surrounding cellular membrane, which is generally more or less diseased. This state is frequently exemplified in hemorrhoids.

Some of the forms of varices here described, must necessarily render the valves inefficient; and, no doubt, they are themselves frequently in a diseased state, and more or less destroyed. In this state, they may sometimes possibly be concerned in producing an impediment to the return of the venous blood, and operate as a cause of the varicose dilatation. Frequently varicose veins seriously affect the capillary circulation in the lower limbs, so as to give rise to a

tendency to chronic inflammation, followed by ulcers, which are termed varicose, and are difficult to heal.

Varicose veins also generally occasion weakness and pain; the latter of which symptoms often extends over a great part of the leg, and is remarkably severe. A varix likewise renders a vein liable to chronic inflammation, ulceration, and hæmorrhage.

The veins, which are most frequently affected, are the saphæna, spermatic, and hemorrhoidal. The disease rarely shews itself in the lower extremities of very young persons; but, in the other situations which have been mentioned, it often comes on at an early period of life.

Tall stature, and the large size, and long perpendicular course of the veins, predispose to the disease, the commencement of which is often dependant upon constipation; the pressure of the gravid uterus on the iliac veins, and sedentary occupations and certain employments, in which the standing posture is long maintained, without exercise.

In the treatment of varicose veins, one principal indication, is to remove the exciting cause. In pregnancy, of course, little effectual amendment can take place till after delivery. In every case, remove constipation. When the disease is situated in the leg, a bandage, or laced stocking should be worn, and the limb kept in the horizontal posture as much as possible.

When the vein inflames, leeches, fomentations, cold lotions, purgatives, quietude in the horizontal posture, and a temporary discontinuance of the bandage, until the inflammation ceases, and the patient can safely get up again, form the right practice. The inflammation of a vein arising from varix is not commonly of that acute, and rapidly spreading kind, which sometimes follows the wound or ligature of such a vessel, and proves fatal.

The treatment of varicose ulcers I have already considered in a former lecture.

When a varix bursts, and much bleeding takes place, pressure and cold applications are required. For the purpose of bringing about a radical cure of varicose veins of the leg, several plans have been tried. The principle kept in view, is to obliterate the vessel above the diseased portion of it, so that the weight of the superincumbent column of blood may be taken off the varicose branches of the vein.

Sir Everard Home recommended the application of a ligature to the vena saphæna, where it passes over the back of the knee-joint; but, as this operation sometimes led to extensive inflammation of the vein, and fatal consequences, it was abandoned, after it had been very fairly tried.

Mr. Brodie then suggested the method of obliterating the vein by an incision, without dividing the skin immediately over the vessel,

This was done with a very narrow, sharp-pointed bistoury introduced under the vein, with the flat part of the blade at first towards it, and then the edge turned upwards, so as to make the requisite division of the vessel. This practice, though found less dangerous than cutting down to the vein, and tying it, is not altogether free from risk; and, on this account, is at present seldom adopted.

The same remark may be made on the scheme of obliterating the sound part of a vein, above its varicose portion, by applying caustic to the skin, and exciting a sufficient inflammation of the subjacent vein to produce an effusion of coagulating lymph in it, and the permanent obliteration of its canal. This method is justly objected to, on the ground of the considerable difficulty of avoiding the opposite extremes of deficient and excessive irritation. While, in some instances, alarming degrees of inflammation have been thus excited; in others there has been none whatever of the vein itself.

On the whole, the best surgeons generally now reject all these more severe modes of treatment, and prefer well regulated pressure, assisted with the other means, which I have pointed out as suited to the various states of a varicose limb.

The varicose enlargement of the spermatic vein, constitutes the disease called *cirsocele*, which, as well as hæmorrhoids, will be considered in a subsequent part of these lectures.

Medico-Botanical Society.

Feb. 28, 1832.

EARL STANHOPE, President, in the Chair.

On entering the society's meeting-room, his Lordship was received with universal and long-continued applause, the whole members standing, as a mark of the respect and esteem entertained for the noble Earl, who now appeared for the first time since the present session, he having lately returned from the Continent.

After the ordinary business was concluded, Mr. Everett, Professor of Chemistry to the society, delivered a lecture on the chemical composition of hydrocyanic acid, and the best mode of obtaining it of uniform strength. He commenced by procuring cyanogen, and then illustrating its combinations with other gases by experiments. He gave the various processes for procuring hydrocyanic acid, and thought all were objectionable, except that of Mr. Clark. He maintained that it was possible to detect one part of the acid in 70,000 of

water, or other matter that might be contained in the stomach; and he described and illustrated the experiments for the analysis with great dexterity and success. He said, however, that the experiments would require two or three days to perform them, in cases in which life or death depended on evidence. The best test for the acid was the sense of smell, by which it could be detected when all chemical analysis was useless. But this was even fallacious, unless the examination took place within twelve hours after death. When he was a pupil in the laboratory of M. Orfila, of Paris, the acid was discovered by smell, after all analytical processes had failed.—Mr. Everett also stated, that hydrocyanic acid is decomposed, even in a phial with a glass stopper, unless the neck of the bottle be immersed in a vessel of water, and the light be excluded. The acid rapidly evaporates, when the pharmacist opens his phial for the purpose of measuring it; and therefore a very small quantity should be kept for common use. He does not think that nitrate of potass, or other neutral salts, or perhaps tartarized antimony, will decompose it, but he has not proved this conclusion by experiment.

The Noble Chairman addressed the society, and returned his grateful thanks for the distinguished honour again conferred upon him, in being elected President of such a scientific and valuable a society. He regretted that the choice had not fallen on an individual more worthy of notice, as he had slender claims to science, and could only promise zeal in the interests of the institution. He regretted his long absence in Germany, and was sorry to state that he failed in procuring the medicine, now used in the smallest quantities, according to the homœopathic doctrine. He hoped to obtain them shortly, and should feel much pleasure in presenting them to the society.—(*Applause.*) He begged to announce, that at the next meeting of the society, March 13, Dr. Ryan, the learned Professor of Materia Medica to the society, would deliver his inaugural address.

The society then adjourned.

Intended Meeting of the Profession for the Dissolution of the Central Board of Health.

MANY of the most eminent physicians and surgeons in London intend to have a public meeting, in order to disabuse the public of the alarm excited by the Board of Health, and the interested. Such a meeting should have been held the moment cholera appeared in the metropolis, as nothing was more apathetic and servile than the conduct of the

whole profession in submitting to the misrule and dictation of three or four army surgeons who were most strangely formed into a Board—practitioners totally unacquainted with the diseases of the poor of the metropolis; and in whose serpentine or cholera opinions, if they published any that were tangible, not the slightest confidence could be placed by the profession. That a Board so constituted, should be placed over the heads of the profession in the first city in the world, and should be empowered to ruin the trade and commerce of England, was one of the most extraordinary events that has happened in the present century. It will form a singular feature in the pages of the future historian. Let us only suppose that three or four provincial barristers were formed into a Board to direct the opinion of the eminent barristers of the metropolis; and then imagine the result. Assuredly the appointment of such a Board would not be so ridiculous as that to which we have alluded.

A Treatise on the Diseases of the Heart and Great Vessels, comprising a new view of the Physiology of the Heart's Action. By J. HOPE, M.D. Senior Physician to the St. Mary-le-bone Infirmary of London, formerly House Physician and House Surgeon to the Royal Infirmary of Edinburgh, &c. &c.

(Concluded.)

SEC. IV. contains a development of the mode in which hypertrophy produces its pathological effects. Laennec and his predecessors imagined that all organic diseases of the heart presented much the same symptoms. Bertin corrected this error, but fell into a greater—contending that hypertrophy gave birth to the symptoms only of increased energy and activity of the circulation: our author has successfully controverted this opinion, and clearly established that, though pure hypertrophy gives rise to increased force and activity of the circulation, yet, when this force surmounts the natural tonic power of the capillaries, congestion, infiltration, and the other phenomena of an obstructed circulation, ensue.

It is only recently that the fearful effects of hypertrophy in producing apoplexy and palsy, has been thoroughly understood. Dr. Hope dilates on this subject with great force, and says, on the grounds of personal experience, that

“Hypertrophy forms a stronger predisposition to apoplexy than the apoplectic constitution itself; and that, in most instances, those persons who present the apoplectic constitution in conjunction with symptoms of increased determination to the head, are, at the same time, affected with hypertrophy.

Nor is it to apoplexy alone, but to cerebral inflammations and irritations of every description, and even to inflammatory action in general, that hypertrophy of the left ventricle gives a tendency.”

The next section contains the signs and diagnosis of hypertrophy, so elaborately developed as to leave little more than differential signs, to be explained in the subsequent chapter on dilatation. Of this section our limits will not allow us to say more, than that several old errors are corrected, several new signs added; and that the whole is not only full and clear, but, from the profoundly analytic spirit with which the symptoms are traced to their causes, it is beautifully simple and convincing.

The ensuing section, on the progress and termination of hypertrophy, is highly important in reference to prognosis, as it presents a truly practical estimate of the circumstances which aggravate, or retard the disease. It is consolatory to be assured that, if well treated, the patient may, in moderate degrees of the disease, “attain even the extreme period of senility, without being conscious that he is the subject of organic disease.”

To the treatment we come with especial pleasure, since it is to this, as the summum propositum, that Dr. Hope has made every other part of his labours converge.

"Before the introduction of auscultation, when practitioners could not distinguish disease of the heart with any certainty, and seldom before it was in an advanced stage, they generally considered it as hopeless, and contented themselves with palliating urgent symptoms. Nor can this be a subject of surprise, for in that stage the disease most frequently is hopeless so far as a cure is concerned. But, since, by the aid of auscultation and the improved knowledge of general symptoms to which it has led, it has become possible not only to detect the slighter degrees of hypertrophy or dilatation, but even the mere tendency to those affections; and since it has been fully proved that, in their early stages and sometimes even when far advanced, they are within the resources of the curative art, the practitioner would be wanting in the performance of his duty to his patient were he not to aim at effecting a cure, rather than content himself with mere palliating symptoms."

Dr. Hope objects, and in our opinion satisfactorily, to the treatment of Laennec on the plan of Valsalva.

"My objections to the treatment described are founded on the circumstance that, though I have invariably found the greatest benefit to be derived from sparing abstractions of blood at intervals of two or three weeks or more, I have constantly noticed that when, from the severity of the dyspnoea and palpitation in the advanced stages of the complaint, the practitioner was induced, or thought himself compelled, to resort to frequent bleedings at short intervals, the patient, though perhaps temporarily relieved, progressively declined from that moment, the paroxysms recurring more frequently and with greater violence, until they eventually terminated in his destruction. Now, on comparing a patient under these circumstances with one under the influence of mere re-action from loss of blood, the analogy appears to me to be very intimate. In both, the violence of the heart's action, so far from being repressed by a reiteration of the blood-letting, is only increased: in both the blood is, and necessarily must be, attenuated and deteriorated in consequence of the fibrinous portion and red globules being replaced to a greater extent than natural by serum, which is more expeditiously regenerated."

Thus the re-action aggravates the palpitation, while the deterioration of the blood renders it unfit for the due nutrition of the system. But it does not follow, says our author, with great acuteness, that

"Though the treatment of Albertini and Valsalva be unsuitable for hypertrophy, it is equally so for aneurism of the aorta; as in the latter the object is, to produce a sudden and extreme, though temporary reduction of the force of the circulation, in order to promote the formation of fibrinous coagula in the sac:—an expedient which is sometimes perfectly successful in aneurism, but which will not have the same effect on hypertrophy."

"It would appear, therefore, that the indications in the treatment of hypertrophy, are to diminish the quantity, without materially deteriorating the quality of the blood; and to do this in such a manner as, without producing re-action, permanently to enfeeble the action of the heart and the energy of the circulation."

For the means of fulfilling these indications, means which, according to our own experience, constitute by far the most rational and efficient mode of treatment, we must refer the reader to the work itself, page 244.

"I have found it effect cures in a considerable number of instances, some of which were advanced even to the second degree. In the first degree, especially before the period of puberty, this fortunate event is often obtained although bleeding be resorted to only at long intervals, as from six weeks to three months."

Dilatation occupies the next chapter. It resolves itself into three natural varieties, corresponding with the thickened, the natural, and the attenuated states of the parietes.

"Dilatation occurs with three different states of the ventricular parietes as to thickness: namely, the thickened, the natural, and the attenuated states. It accordingly resolves itself into three natural varieties corresponding with these states.

1. *Dilatation with thickening*, in which the cavity is enlarged and the walls thickened.

2. *Simple dilatation*, in which the cavity is enlarged and the walls of their natural thickness.

3. *Dilatation with attenuation*, in which the cavity is enlarged and the walls attenuated.

The first variety is identical with that variety of hypertrophy called *hypertrophy with dilatation*, but different names are employed for the two, in order to express, in the former, a predominance of dilatation, and in the latter, of hypertrophy. The second variety is perfectly identical with *hypertrophy by in-*

creased extent, with natural thickness, of the walls; but it is better to employ the term *simple dilatation* when the dilatation is so great that its symptoms predominate over those of hypertrophy."

After delineating the anatomical characters, and stating that he has known rupture of the head to ensue from the softening which generally accompanies dilatation, Dr. Hope presents the criteria by which this affection may be distinguished from mere distention. In the next section, on the mode of formation, and causes of dilatation, he says,

"Dilatation of the heart is a purely mechanical effect of over-distention. Blood, accumulated within its cavities, exerts a pressure from the centre towards the circumference, in every direction; and when once it surmounts the resistance offered by the contractile and elastic power of the parietes, these necessarily yield and undergo dilatation."

He then states which cavities are the most susceptible of it, and gives his usual masterly analysis of the causes. Section III. displays the mode in which dilatation produces its pathological effects; our author has here exposed a radical error in the doctrines of Bertin, who regards dilatation as merely *secondary* to another lesion—an obstacle to the circulation, which obstacle is the source of the symptoms usually ascribed to the dilatation itself.

"I cannot concur with M. Bertin in these opinions. It is true that in order to produce dilatation, there must exist a weight or pressure of the circulation upon the heart, greater than the organ is capable of sustaining: and it is true that such pressure may be occasioned by the mechanical obstacles to which M. Bertin ascribes it: namely, contraction of the orifices of the heart, diseases of the aorta, and all maladies which impede the course of the blood, whether in the lungs, or in the system of the great circulation. But it is equally true that the same pressure on the heart may result, not from increased weight of the circulation, but from deficient power of the heart; and such is its cause in those, who, by original conformation, have the organ thin, in proportion to the size of the body."

So far is our author from thinking that the obstacle alluded to by Bertin,

is the main cause of the symptoms which he attributes to it, that, says Dr. Hope,

"I have repeatedly witnessed cases in which a well marked, if not a considerable obstacle, as a contracted valve or a dilatation or aneurism of the aorta, had subsisted for a long period, even for years, without producing any material symptoms of an obstructed circulation; but the moment that dilatation of the heart supervened, the symptoms made their appearance in an aggravated form. I apprehend, therefore, that the heart is the part mainly concerned in their production: nor do I think this opinion less tenable because the symptoms are more severe when enlargement of the heart co-exists with an obstacle, than when the enlargement exists alone; for it is natural to suppose that when two causes conspire to produce the same effect, that effect should be greater. But this is not all; for not only does each produce its own effect, but one increases the effect of the other, namely, the obstacle adds so much to the pressure of the circulation on the heart, that this organ labours under a double disadvantage, first, from its own diminished power, and secondly, from a preternatural pressure upon it. Thus the resulting effect of the obstacle and the dilatation of the heart combined, is greater than the sum of the two taken separately."

Nothing can be more forcible than such reasoning. The signs and diagnosis spring naturally out of the foregoing principles, and are as simple and obvious as the reasoning on which they are founded is clear. We would particularly draw the reader's attention to page 273, where are some corrections of Laennec's scale of the range of sound in dilatation. We pass to the treatment.

"The first indication is, to remove if possible, the exciting cause of the dilatation; and if this be done before the disease has proceeded to such an extent as entirely to deprive the muscular fibre of its resilience and elasticity, these faculties come into operation and restore the organ to its natural size."

The dilatation resulting from causes of a temporary nature, if not inveterate, can be removed.

"But when the cause is permanent, as the contraction of an orifice of the heart, or a natural or acquired feebleness of the organ in

proportion to its function, a cure of the dilatation is scarcely to be expected; but it may often be prevented from increasing, and the life of the patient may sometimes be prolonged even to its extreme limits. In such cases, therefore, the practitioner should steadily and perseveringly pursue a palliative and prophylactic treatment, having first discarded from his mind the impression no less erroneous in itself, than detrimental to the progress of medical science, namely, that organic diseases of the heart are necessarily fatal, and that therefore all treatment is unavailing.

The treatment consists in keeping the heart tranquil by a quiet life, and by obviating all derangements of the stomach, intestinal canal, and nervous system: the tone of the body being, at the same time, preserved by a nutritious but unstimulating diet, a bracing air, and the shower bath under certain limitations. Of medicines, bitters, mineral acids, and especially chalybeates, are the best. For the rules for blood letting, we must refer the reader to page 284, as they are too important to be cursorily sketched.

We are compelled to pretermitt several chapters, comprising an excellent one on *softening* of the heart, in order to pass on to *disease of the valves*, where our author has concentrated all the powers of his mind, thrown in the whole weight of his practical experience, and produced incomparably the most perfect and beautiful essay that has hitherto been penned on the subject.

The anatomical characters, which, we may remark, are drawn almost entirely from original observations, and which justify the highest eulogiums that we have passed on Dr. Hope's descriptive powers, we must wholly overlook; as also the account of valvular vegetations. In the next section, on the mode in which disease of the valves produces its pathological effects; Dr. Hope presents a novel doctrine, which cannot be too strongly graven on the attention. The disease obstructs the orifices of the heart, and by thus creating an ob-

stacle to the circulation, gives rise to its characteristic symptoms. But, says our author,

“The general symptoms, however, when of an aggravated nature, are seldom dependent on the valvular obstruction exclusively; they are partly attributable to a co-existent disease of the muscular apparatus of the heart. For, so long as the organ remains free from dilatation, hypertrophy, or softening, the valvular disease, according to my observation, is not in general productive of great inconvenience.”

“This opinion is founded on the following grounds. I have seen individuals, who were affected in an eminent degree with disease of the valves or of the aorta, maintain for years a very tolerable state of health so long as there was no hypertrophy or dilatation of the heart: but, in proportion as these supervened, the symptoms of valvular obstruction became more and more developed, and eventually assumed their most aggravated form.”

“It is of immense practical importance to keep in view the facts stated, namely, that valvular contraction does not produce formidable symptoms until it has given rise to hypertrophy or dilatation.”

He then explains *how* hypertrophy and dilatation aggravate the symptoms of valvular obstruction. On the signs and diagnosis of disease of the valves, Dr. Hope has thrown much new light, see, for instance, page 331, et seq. on the characters of the pulse; also, the application of the various species of morbid murmur as signs of disease of the valves severally, page 340 et seq. This account of the signs, founded directly on personal observation, is far more precise and practical than any that has hitherto been given, and the proofs of its fidelity are to be found in the remarkable accuracy of the author's own diagnosis: *vide* Cases. The section on cardiac asthma, which follows, is a master-piece;—we cannot repress our admiration of the beautiful and scientific manner in which physiological and pathological principles are adapted to the explanation of symptoms.

“With respect to the comparative value of the general and physical signs of disease of the heart, it may be said that Laennec

rather under-valued the former and over-rated the latter. This was owing principally to the general signs being less perfectly understood when he studied than they have subsequently become in consequence of being investigated with the aid of auscultation. The ardour of his early disciples, who imagined that the physical, rendered the general signs superfluous, brought auscultation into some disrepute by the inaccuracy of their diagnosis. But since the stethoscope has taken its proper place as an auxiliary only, and the diagnosis has been founded on the two classes of signs conjointly, auscultation has ranked as a discovery which will immortalise its author and form an epoch in the history of medicine."

Our own experience convinces us that, however liberal this feeling, recantation will be unnecessary: and we have reason to know that many, who entertain opposite views, argue from cases, which they have not discovered to be cases of disease of the heart.

The next section, on the treatment, contains a *detailed* exposition of the remedies for disease of the heart in general, and the precise mode of their employment: to this section, all the others on treatment more or less refer: it is evidently the result of great experience, observation, and reflection. Our limits forbid us to quote more than a concluding remark.

"Such are the remedies to be used in the treatment of organic disease of the heart. It cannot be too strongly inculcated on the practitioner, that the disease, when remediable, is not to be cured by *relieving* the paroxysm, but by *preventing* its occurrence. Every attack gives the patient much ground to retrace: a single attack may undo the progress of a year, and death may result from the indiscretion of a day. Great firmness is necessary on the part of the physician to impress this strongly on the mind of the patient; for the latter, when his *feelings* are easy, can seldom—very seldom—be made to comprehend that the necessity for his rigid adherence to medical, regimenal, and dietetic discipline is equally imperative."

Aneurism of the Aorta forms the subject of the next chapter. Dr. Hope is well known as the author of a series of essays on this disease, pub-

lished several years ago in the *London Med. Gaz.*, and his researches have fully redeemed this malady from the catalogue of those which Laennec left, according to his own avowal, without positive signs. The essay, necessarily diffuse from the ground being new, is excellent. In the chapter on *malformations*, we would especially direct the attention of our readers to Dr. Hope's explanation of the cause of the hypertrophy of the right ventricle, which generally accompanies a communication between the two sides: *vide* p. 462. We pass over a pithy article on angina pectoris, to dwell for a moment on *nervous palpitation imitating disease of the heart*—a truly important subject; for, says our author,

"There are few affections which excite more alarm and anxiety in the mind of the patient than this. He fancies himself doomed to become a martyr to organic disease of the heart, of the horrors of which he has an exaggerated idea; and it is the more difficult to divest him of this impression, because the nervous state which gives rise to his complaint, imparts a fanciful, gloomy and desponding tone to his imagination. Members of the medical profession are more apt than others to give way to these feelings; partly from their apprehensions being more keen, and partly from an impression too widely prevalent, that there is difficulty in distinguishing nervous from organic palpitation, and, consequently, that they must remain in a state of anxious uncertainty. It may be said for the consolation of such, that the diagnosis presents no difficulty to one who, to general signs, adds a knowledge of those afforded by auscultation and percussion."

The diagnostic signs are most lucidly developed in the brief space of a few pages, and several striking and highly illustrative cases are added. On few subjects has greater diversity of opinion subsisted than on *polypi* of the heart. Dr. Hope espouses the view that some form after or during dissolution, and others anterior to it; which latter are the cause of certain well marked symptoms. He clearly shews that polypi are results of stagnation of the blood, and not, as some

have imagined, of inflammation. Their adhesion he conceives to be occasioned by the irritating action of the bodies themselves on the walls of the heart : whence there results an exudation of lymph from the latter, which forms the agglutinating medium. Laennec professed himself unable to offer any certain signs of polypi : our author says,

“ But if, together with them, the *general* signs be taken into consideration, the diagnosis may, I presume to think, be almost always formed with accuracy. The general signs, according to my observation, are, a sudden and excessive aggravation of the dyspnoea, without any other obvious adequate cause. The patient is in agony from an intolerable sense of suffocation ; he cannot lie for a moment, and he continues tossing about in the most restless and distressed condition until his sufferings are terminated by death. During this state the surface and extremities are cold, the complexion livid, and in most cases, there is nausea, and vomiting of all ingesta.”

The concluding remark is highly important :

“ One of the greatest dangers of excessive blood-letting or otherwise reducing the system, and of the indiscreet exhibition of nauseants and digitalis, in advanced stages of organic disease of the heart, arises from the risk of the formation of polypi in consequence of languor of the circulation.”

No part of this work is more creditable to the author, than the fair and open manner in which he has collected his cases—a subject to which we have already adverted in our first number. The real value of the diagnostic means, is unequivocally ascertained on the plan which he has pursued, and the surprizing accuracy of his diagnosis must satisfy the most incredulous that the diseases of the heart, in every form, can be detected with facility and certainty. The cases are models of their kind, and will form admirable *practical* lessons for the student of auscultation.

Justice compels us to complain of Dr. Hope's silence on the valuable researches of contemporaneous writers :

We find no mention made of Dr. Corrigan, Dr. Stokes, Dr. Haycraft, and Mr. Hart, of Dublin, or of M. Pigeaux of Paris, though the controversial writings of these physicians against the accuracy of Laennec's conclusions on the motions and sounds of the heart, occupied too much attention within the last year to escape the memory of our author, or of any one who keeps pace with the progress of medical science. We regret that Dr. Hope has left himself liable to this charge ; and we trust that he will remove it in a new edition.

We had almost forgotten to advert to the style, which is eminently terse, nervous, and lucid ; rising, where the subject is of a less severe kind, into a richness of expression and idea, that evince the imagination of the author to be no less fertile, than his reasoning faculties are powerful. It is a well written book ; and we have pleasure in saying this, because our profession of late is not very remarkable for accuracy of composition.

We now take our leave of the writer ; and we do it with the feeling which we are convinced will be common to all his readers—that he has established his reputation as a physician of high talents, of great experience, and of indefatigable industry.

On the Phenomena of Dreams and other Transient Illusions. By WALTER C. DENDY, M.R.C.S. 12mo. pp. 154. London. 1832. Whittaker and Co.

MR. DENDY is known to the profession as the author of a concise and graphic work on Cutaneous Diseases, and as a surgeon of high attainments. The present volume is beautifully written, evincing great research, and a fund of curious and interesting information on the subject of which it

treats. But the author has left the subject precisely as he found it, and yet may console himself with the reflection, that he has illustrated it fully as much as any of his predecessors.

The Life of John Walker, M. D. &c.

By JOHN EPPS, M. D. Lecturer on Materia Medica and Chemistry, Director of the Royal Jennerian and London Vaccine Institutions. Second Edition. 8vo. pp. 342. London. 1832. Whittaker and Co.

THE great press of matter, arising from the progress of epidemic cholera, and the interminable disputes of the faculty with regard to its contagiousness or non-contagiousness, have compelled us to neglect noticing many works of merit now on our table, and among these *Dr. Epps's Life of Walker*. In the monthly series of this journal we predicted the success of this work, and our opinion is now amply confirmed by the appearance of the second edition, within a few months of the first. As this classic and amusing work is published for the benevolent purpose of benefitting the widow of an eccentric and excellent physician, we trust it will be generally patronized by the profession.

Bristol Infirmary.

Important Surgical Operation for the Cure of Stone, known by the name of Lithotripsy.

THIS was a novel operation—one of those useful improvements of this enlightened age, which, while they extend the field of science, give facilities for the relief of human suffering in one of the most painful diseases to which mankind are subject. The original inventor is M. Civiale, and the immediate operator was Mr. Costello, his pupil and assistant. Perhaps we should explain why this gentleman should perform this operation in our institution.

VOL. I.

The subject of it has been for many years afflicted with the disease of the stone in the bladder. The only mode of relief known, previous to the present century was by the knife; but this was a case to which that remedy was inapplicable, decided to be so after a consultation of the faculty of the house. Mr. Hetling, the surgeon of the patient, having been introduced to Mr. Costello in London, that gentleman most generously and benevolently offered to come down; and the operation of yesterday may be considered rather as an experiment to ascertain its applicability.

The theatre in which it was performed was filled with almost every respectable physician and surgeon in the city, and some came from a considerable distance to witness it. The patient was then introduced—he was young, and exhibited symptoms of acute suffering. As soon as he was placed on the operation board, the bladder was first emptied, and then distended by the injection of a simple fluid. The instrument was next introduced. It consisted of three branches or claws, each overlapping the other by a curve; they were kept collapsed by a sliding tube, which, after it was introduced, was pushed back, and the branches then distended, and grasped the calculus. At this period the instrument was distinctly heard to strike the stone, and now came into operation, the principal part of the machine, which may be called the crusher, and is in the centre, and embraced by the branches. The latter holds the calculus fast, and the former is quickly revolved by the bow, and operates by boring or crushing the stone. At this period the stone, being partly broken, escaped, and the operation closed by convincing every one of the certainty of its success.

The patient, who had scarcely uttered a single exclamation, and did not appear to suffer any extraordinary pain, rose from the table and walked to his ward. There he evacuated considerable portions of the calculus, that had been crushed or separated from the main stone by the operation. The success of the operator was rewarded by the loud applause of the spectators, which cannot but have been gratifying to him, coming from the most eminent members of his profession in this city.

Mr. Costello will revisit the city, for the purpose of completing the operation, in about ten days. When we consider the agonies endured by the other mode of operation, and its frequently fatal termination, and contrast with it the apparent facility and capability of endurance of that which we witnessed yesterday, the gain to society by the latter is obvious and incalculable. There was a gentleman present who had been relieved from a very large stone by Mr. Costello.

[We are happy to state that this gentleman has now succeeded in curing thirty

patients of urinary calculus. We have witnessed some of his operations, and can state, with perfect truth, that in his hands lithotripsy is a safe and painless process, and must supersede the horrible operation of lithotomy. The most eminent physicians and surgeons recommend him patients, such distinguished individuals as Sir Henry Hallford, Sir Astley Cooper, Mr. Brodie, Mr. Lloyd, &c.—Eds.]

MR. BOWIE on the Conduct of the Central Board of Health and their Cholera Gazette.

IN remarking on the case of the mate of the *Felicity*, I shall follow as closely as possible the article as contained in the *Cholera Gazette*, and I believe there will exist but little difficulty in laying bare the malignity of its writer.

From the documents relating to the case in question submitted by me, in whose practice the case occurred, to the Central Board of Health, and the Inspectors deputed by the Board to examine and report upon their nature, is arranged such a view of the particulars yet ascertained, as will enable all competent persons to draw their own conclusions fairly on the subject, and to appreciate the remarks which may subsequently be offered thereupon.

In doing so, I may be permitted to aver, that it is equally foreign to my wishes to exaggerate the alarm these and other occurrences of a like nature have not unreasonably excited; or, on the other hand, to trifle with facts, in the nature of which the public health, and I may add the public welfare, may be seriously involved. Dismissing then all theories or idle speculations, all pre-conceptions or prejudices from my mind, I shall proceed to contemplate the various phenomena in question, for the purpose of affording the means for ascertaining by the rules of strict and cautious induction, what are the conclusions which they rationally afford.

The Editor is pleased to say, the man died after an illness apparently

of seventeen hours; it was represented that he had been taken ill about three o'clock.

My verbal report, and the official reports from Messrs. Brown and Porteous, the medical officers at Standgate Creek, containing the results of their inquiries into the case, and the details of the necroscopic examination they were directed to institute, form it would seem, the grounds on which the opinion was to be built of the nature of the disease; and *a priori* would seem best calculated for such a purpose. But when it is seen, by examining my report, that in the pages of the *Cholera Gazette*, it is most unfairly represented, and made to contain many things which are untrue, and that the report from Standgate Creek is incorrect, such evidence cannot be admitted.

It is said, "Mr. Bowie alleges that he found the patient perfectly blue." I did so—it is recorded in my report, that judging by candle-light, such was the case. The Captain's evidence corroborates that circumstance, as does also that of the boy; allowing Messrs. Brown and Porteous to be correct on that head, is it not said, that in a case allowed to be cholera, the lividity or blueness, some hours after death, decreased?

The Captain makes the patient two years younger than I did; the breath was cold, and I felt it on the back of my fingers when I was attempting to discover pulsation in the temporal artery or carotids. It is acknowledged by the Board, that the evacuations were such as I described them; and although now the albuminous appearance is thought lightly of, it was thought of no trifling importance when I stated it to the Board.

It is needless to enumerate all the symptoms.

It is stated in italics, that two and a half ounces of mustard were given before vomiting was produced. Dr. Lindsay has recommended it to be given freely in doses of two ounces,

and has placed no limits to its use. But let me tell the gentlemen of the Board, I have been in the habit for more than twenty years of using mustard liberally as a stimulating emetic in cases of collapse and very extensive blueness arising from excessive inebriation, or over doses of narcotics; and, in one case, which I lately rescued from the jaws of death, by means of the stomach pump I threw into the patient's stomach at different times about four ounces, and would not then have accomplished my object of exciting vomiting, had I not also called in the aid of ipecacuanha and ammonia.

It is said Mr. Bowie further informed the Board, that the man was stated to have been in perfect health up to the time of attack. In a note it is said, "this statement, it will be subsequently seen, has not received confirmation." Not pretending to be possessed of that instinct peculiar to the Board, which enables them to distinguish or to give a name to diseases without regarding symptoms, or of bringing forward evidence which is positively said never to have existed, I could not with truth have said any thing else than that which had been told me.

The Captain, with regard to the man's reported illness, as stated by the *Cholera Gazette*, has most emphatically declared in the presence of respectable witnesses, that "it is false."

[The Captain's statement is before us.—Eds.]

Messrs. Porteous and Brown further describe, that about two hours after the administration of a mustard emetic, he experienced some relief, but that his breathing became *slow* and *laborious*, and that he expired at the time already stated "without having experienced any other symptoms." The truth is, he experienced almost instant relief. (Vide Captain's evidence).

But now comes something import-

ant—a brief examination into the indications afforded by the symptoms as a prelude to the pathological report. "From this it appears, that up to the time when first seen by Mr. Bowie, at 11 p. m. symptoms of pulmonary disease had existed for several days; this statement, as has already been shewn, *has not received confirmation.*" Up to this time no spasms had been reported: this statement has received complete refutation. It is said he had a rheumatic affection; "he was neither lame nor stiff."—CAPTAIN. As to the turpentine, are the gentlemen of the Board who pretend, some of them I suppose from instinct to such an intimate knowledge of the habits of seamen, not aware it is customary for such men to prescribe for themselves when they, whether correctly or not, take it into their heads that they are affected by a very common disease which shall be nameless, and that turpentine is one of their favourite remedies. Did he say the mercurial ointment and the mixture were good for rheumatism?

"The only ascertained symptom then characteristic of cholera, previous to Mr. Bowie's visit was the serous diarrhœa. All the others, blueness of skin, impeded and imperfect circulation and respiration, &c. were equally peculiar to an aggravated form of the pulmonary disease under which he had been previously labouring."

"It will be remembered, that the spasms were first *noted* by Mr. Bowie; that this gentleman arrived at 11 p. m. and that the administration of the mustard was then immediately commenced." I feel almost tempted to use the Captain's concluding expression, but shall content myself with declaring such allegations totally incorrect.

The pathological report will now be consulted with advantage.

"Countenance placid and florid, with no collapse of features," rendered incredible by the Captain's evidence, and that of the boy; "consi-

derable florid discolouration of the skin about the back part of the neck, and between the shoulders, caused by a disposition of blood into the integuments after death." Let me ask these excellent judges of causation, if the mustard that was applied during life might not have had some share in producing it. The quantity of serum on the ventricles ought to have been mentioned.

The deep purple hue and the crimson patches in the lungs, may have been visible, but as it has been shewn, cholera has been present, or, at least, said to be present, in cases where there was a diseased state of various viscera, the sufficiency of proof might be questioned. The vessels are described as having been "so gorged with blood, and the effusion into the air cells so great, as to render these viscera incapable to perform their functions. The left lobe appeared most affected." How is this state of lungs reconcileable to the fact that the man's respiration improved, and that he breathed easy, even to the last?

Heart.—No morbid appearance: a coagulum of lymph in the left ventricle; no accumulation mentioned in the right auricle or ventricle, and why not mentioned, when so much importance is afterwards attached to its appearance?—Remarkable omission!

The external appearance of the stomach was pale. It contained nearly a pint of a pale yellowish fluid, having some oil floating on its surface. The oil has been accounted for—so may, in some degree, the pale yellowish colour; but it affords proof that the vomiting must have been tolerably copious, as, after it had ceased, he had his medicines administered three times in gruel, and drank at one time, unmixed, a breakfast cup full of it, besides taking occasionally small quantities.

The other appearances of the viscus do not deserve notice.

The large intestines perfectly healthy, and contained little else but flatus, with which they were fully distended. What was that little else?—it surely ought to have been stated.

Is it not probable that distention was anticipated?—The ingredients of the mixture which was sent on board will testify.

"There was no appearance of bile throughout the entire alimentary canal; a circumstance, of course, of no importance! The whole of the ileum and a portion of the jejunum exhibited, externally, a slight blush of inflammation; internally the mucous coat seemed natural; the liver was perfectly healthy, and presented no particular congestion of its vessels; gall-bladder nearly filled with fluid bile; kidneys healthy."

"The urinary bladder empty and collapsed, but not contracted;" no urine had been passed; re-action, which is not reported in the *Gazette*, had taken place to a considerable extent before I left my patient, and might, ere death occurred, have produced several changes. But there is no need for taking the trouble to reason on that point, as it is not at all improbable that they who saw a florid placid face days after death, might also have optics pre-disposed to see an uncontracted collapsed bladder.

To enable his readers to inquire into the nature of the indications afforded by the autopsy, the editor of the *Cholera Gazette* has presented them with the signs invariably present in cholera diseases, as enumerated in the *elegantly* classical Latin work:

1. Lividity of the surface of the body, especially the lower surfaces.
2. Rigidity of the entire body.
3. Black and grumous blood especially abundant in the veins.
4. Turgidity of the cava and of the vena portarum.
5. Dark or brown blood in the arterial system.
6. Fibro-gelatinous concretions,

vulgo polypi in the right auricle, and ventricle of the heart.

7. Congestion of the proper vessels of the heart.

8. Urinary bladder *contracted*, and either altogether empty, or containing but a very minute portion of urine.

"Having this standard before us, we are now fully prepared to understand how far the dissection of the deceased seaman tended to confirm or refute the suspicion that he died of the malignant cholera.

"In the examination then we have,

1. The countenance florid"—improbable; "no collapse of features"—might not putrefaction have been going on? "Florid discolouration of the depending parts of the body"—the back part of the neck, and between the shoulders, are the parts mentioned in this truly minute autopsy. "*No lividity*"—this assertion is not confirmed, but contradicted by the evidence of the captain, who said the face looked as if painted.

"2. No congestion of the vena portarum"—not a word said about this vessel in particular.

"3. No accumulation of blood or fibrinous concretion in the right side of the heart"—no accumulation mentioned, is all that is reported.

"4. The urinary bladder collapsed and not contracted"—the florid colour of the face, which indicated reaction, is rather contradictory of this statement.

It must be evident that the dissection has either been carelessly performed, or reported in such a manner as to reflect little credit on those concerned with it; and although engaged more in domestic practice, where but few dissections are permitted, I believe I should find little difficulty in propounding questions to the familiars of the office, which would cost them a little trouble to answer.

"Here then we have indisputable evidence that of all the essential anatomical signs constantly and invari-

bly existing in cholera, *not one* was present"—let this be remarked. "As far, then, as the existing state of knowledge entitles us to reason upon the subject, we have here decided proof that this man's death was not the effect of that disease"—the proof has been shewn not to be decisive; on the contrary, it is most likely to be thought a tissue of mystification. The case was admitted by the Board to be cholera, when first reported, but as there was no evidence of contagion it is now, of course, not the disease.

The existence of considerable anatomical lesions, is improbable.

As to the hepatisation of the left lung, and the prodigious effusion into the right lung, explaining the circulatory and respiratory derangement, it is at variance with the facts of the man having become easier, warmer, sleeping tranquilly, and "drawing his breath easy, even to the last." It may be that some sailors are in the habit of struggling with their maladies to the last; but to those acquainted with the habits of those in merchant ships, particularly in port, such is but rarely the case.

When the pulmonary disease manifested on his voyage, and the fatigue which he underwent, are to be taken into consideration for the non-violation of probability in making the ridiculous assumption, that he struggled with the pulmonary disease until his fortitude and his physical energy were simultaneously overpowered, it ought to be remembered that the pulmonary disease was an assumption, and that he had been, to all appearance, in his usual health, for the three weeks which the vessel had been at London.

If the pulmonary effusion should happen to be doubted, it will not be necessary to waste time inquiring into its being an essential sign of the non-existence of cholera.

"What then have we in opposition to the *incontrovertible testimony* af-

forded by the dissection. We have serous diarrhœa and vomiting occurring before the visit of the surgeon, and cramps after two ounces and a half of mustard were administered, part of which was found in the stomach after death. And, lastly, we have the rapidly fatal termination of the case."

Two ounces of mustard have been ordered, as already mentioned, by a physician connected with the Board, and no limits set to the quantity to be given; few indeed, and of a comparatively trifling nature, were the cramps after its exhibition. Very little could have remained in the stomach from the quantity of gruel he had taken after vomiting had ceased; and I am convinced that had not these, or similar means been used, death would have occurred more speedily.

"With respect to the serous diarrhœa, we will only remark, that any irritation of the bowels, or a hydragogue-cathartic administered when they contain no food, will induce whitish aqueous evacuations, containing albumen and the salts of the blood, and therefore differing in no essential particular from the evacuations erroneously supposed to be a logical or essential attribute of the true forms of cholera."

The question that may here, with propriety be asked, what occasioned this irritation, &c.? No hydragogue is reported to have been taken: the man had taken his dinner in his usual manner; and marks of inflammation have been found in the intestines of patients who were reported to have died of cholera. Now the signs of irritation in the jejunum and ileum, allowing them to have existed, will not to many afford an ample or satisfactory explanation of the extraordinary vomiting, purging, spasms, prostration, and rapid death which took place. I have already given my opinion as to the treatment having had no effect in hurrying on the disease,

but cannot help calling attention to the assassin-like mode in which it is attempted to stab my professional character. "Do, do as you have done, you cannot do better," says Dr. Russell: "Mr. Bowie has acted with great promptitude, propriety, and, I believe, decision," say the Board. And I am sent forth to repeat, with their sanction, practice which these gentlemen seem now to condemn. It may be said, had this been a case of cholera, the treatment was proper; but let me ask, how am I to distinguish cholera?—in English not in Latin, either classical or unclassical. At the 123rd page of the *Gazette*, containing my patient's case, is to be found the definition of the term cholera, according to the understanding among the members of the Central Board.

"*Cholera*.—This word is here employed in a *generic* term, in which sense it is to be understood as including every disease, *or form of disease*, in which vomiting, purging, cramps, prostration, and collapse, or the majority of these symptoms—any three of them do appear simultaneously, or in rapid succession in the same individual:—

1. Vomiting,
2. Purging,
3. Cramps,
4. Prostration,
5. Collapse.

1. and 2. Vomiting and purging: allowed by the Board, and accounted for by the appearance of inflammation on the intestines.

3. Cramps: proved by the captain, his seamen, and my brother, as having existed before I saw the patient.

4. and 5. Prostration, collapse, also proved by the captain, who said he looked half dead, and his face was like a man in trouble."

As the man exhibited all and every of these symptoms—until they can prove that there did not exist any form of disease, I have a right to

report it, according to their own shewing, a case of cholera. And surely Dr. M'Cann cannot be unacquainted with the learned work brought against me.

The markings and modifications mentioned as influencing the man's case, are but the writhings of their serpentine devices, and will serve but as lights to illumine the treachery of the attack.

When they presume to venture conjectures upon the modifications cholera may undergo, they ought to remember, "there are more in heaven and earth than their philosophy can account for."

The concluding portion of the article is worthy of consideration, and most clearly elucidates the absurdity of the proceedings of the Board:—"On the whole, we deem this case to be a most instructive example of the fallaciousness of the doctrine, that holds similarity, or even identity of symptoms, to constitute identity of diseases. Not many weeks since, the presence of a needle in a man's stomach, produced the majority of the worst and most peculiar symptoms of blue cholera, and the truth was only revealed by a cautious pathological investigation."

Then it seems Dr. M'Cann is not trustworthy; that the medical profession is to be paralysed because whatever the symptoms may be, we must not attempt to relieve them, in case it should not present, on *post-mortem* examination, the essential signs of cholera. Verily this must afford great comfort to the sufferers and their friends. It must be very consolatory to see a medical man put his hands into his pockets, or behind his back, and say—I dare not assist you—I might do you an injury; but when you die I shall dissect your body, and report what was the cause of your death, if I may be permitted. A goodly plot for perpetuating, *ad infinitum*, the existence of cholera, to frighten the public until bodies can

no longer be allowed to undergo the necessary examination; and report every case of gastric irritation, or sudden indisposition, to the much-talked of cholera.

In the case of the man with the needle in his stomach, might he not have escaped such severe symptoms, had there not existed an agent which modified them?

Will the Cholera Board explain why they have presumed, knowing the fallaciousness of symptoms, to cause placards to be posted on the walls throughout London and its environs, directing, in every instance where symptoms of gastric irritation are present, to commence swallowing, on the first attack, such a stimulating medicine as mustard? A mode of treatment which, although when the powers of life are sinking, or about at a stand, I would use freely, I would cautiously avoid where no such exhaustion existed.

Allow me in conclusion to remark, that had my patient been in Sunderland, or at any of the places where the disease is prevailing—had he been employed in scraping the bottom of a Sunderland or Newcastle collier, or had he come in contact with the poor scraper, and could the disease have been "accounted for"—then it might have been received as a case of genuine blue spasmodic cholera. Can such humbug be longer tolerated? The medical profession is come to a deplorable condition, indeed, when such a Board as this can not only defy them, but close the port of London; when such a body, composed of medical men who had no practice in London, have the temerity and audacity to presume to dictate to those who have spent their lives in active practice in the metropolis. If the disease be no epidemic, but a new one, and as all admit not of Asiatic origin, can this Board, composed of three or four army surgeons, know more about it than those who have practised here among the poor for

twenty and thirty years? Such an idea is preposterous—is ridiculous—is consummately absurd. How long will the profession tolerate such nonsense?

Burr Street, March 1st. 1832

THE

London Medical & Surgical Journal.

London, Saturday, March 10, 1832.

PROGRESS OF CHOLERA.

MARY-LE-BONE JOB.

THE alarmists still continue to pursue their unhallowed course, in open violation of the truth. The Central Board of Health and its dependents continue to impose upon the credulity of the public, by circulating copious reports of fictitious cases, which are not spasmodic cholera. On Saturday last, this purely disinterested body spread alarm through the great parish of Mary-le-bone, by proclaiming the existence of sixteen cases of Asiatic cholera in the workhouse of that district; and upon the sole authority of some officious busy body, a Doctor of Divinity, residing somewhere in the neighbourhood of the parish.

When we consider the bare-faced duplicity of the Board, in publishing such cases upon such absurd authority, we are at a loss for language adequate to the expression of our utter con-

tempt for that body. *Ex uno disce omnes.*—Such is this Board, which has degraded the profession to an unparalleled degree, and rendered the once respected term—Doctor—a term of sovereign contempt; which continues to insult the dignity of medicine, and the common sense of the public. We are filled with wonder, and astonishment, that the profession have so long submitted to the blind guidance of this insolent and impudent junto.

On referring to our report of the Westminster Medical Society of Saturday, it will be found that Dr. Johnson, Dr. Sigmond, Dr. Webster, and many other eminent physicians, had seen the above reputed cases with Dr. Daun of the Board of Health, and one and all declared that they were not malignant cholera. Dr. Hope, the able physician of the workhouse, published a statement in the newspapers of yesterday, declaring the cases to be mild cholera. What confidence, we beg to ask, can be placed in a Board thus convicted of deliberate falsehood?

We do not know the name of this Son of the Church Militant, who has so ridiculously meddled in medical matters, but we think with Dr. Johnson, he would have been much better employed in curing souls than bodies. He might as well have attended to the temporal concerns of his vocation, we mean, of course, the tithes of his livings, and allow the medical officers

of Mary-le-bone to superintend their miserable cholera patients. Perhaps he had an itching for one tenth of the infected, or thought by obtruding himself upon the Government, that one of the glittering mitres, which appeared in his mind's-eye, in perspective, might light upon his head.

Another topic connected with this nefarious transaction, is the order posted on the porter's lodge for the exclusion of Dr. Sigmond.— This emanated from the Governors, and we are proud to state that the medical officers of the Institution, had no concern with that disgraceful mandate, which insulted a physician of great ability, of real independence, and an officer, holding an important public situation, in the parish. But Dr. Sigmond's manly exposure of the *ecclesiastical* cases of malignant cholera, was, by the informant and the deluded Board unpardonable; and this was the head and front of his offending. He can console himself however, with the agreeable reflection, that he spoke the truth, and shewed in true colours, the utter worthlessness of the spurious and sinister mushroom medical Body, who unmindful of the confidence reposed in it, has duped the Government and the public, and insult the physicians and surgeons of the largest and most respectable parish in the metropolis, and on the authority of an individual, who, we take for granted, knows as much about the characteristics of spasmodic cholera, as he does about

the inhabitants of the moon. In conclusion, we must add a few words on the proposed Cholera Hospital of Mary-le-bone, the veriest Job in the metropolis. A house in King's Road, near the workhouse, which belongs to one of the select vestry, was formerly let for £100 a year, and was lately offered for £70. was proposed to be taken for two years certain, at £400.!!! and it was resolved to allow the medical men, £2. 2s. for each cholera case, and ten shillings and sixpence extra, provided the patient survived the fifth day.

These facts, we are of opinion, are quite sufficient to account for the sudden increase of malignant cholera in Mary-le-bone parish.

To the Editors of the Medical and Surgical Journal.

GENTLEMEN,

SHOULD you think well to allow the following case and remarks, a place in your valuable journal, you will oblige me by giving them early insertion.

Your's respectfully,
E.

In the middle of last October, I attended a clergyman, about fifty years of age, living in a healthy village, who was attacked by rheumatic pains in the knees, and lumbar region. I ordered him small doses of calomel with digitalis, with colchicum and saline purgatives. In a few days the swelling in the knees had disappeared, the pain was less constant, and the knees, elbows, and hands now became affected. The patient was excessively nervous and hysterical, and occasionally rather wandering. His urine was pale, clear, and copi-

ous, with a considerable quantity of mucus from the bladder, floating in it.

From the nervous state of the patient, and the intermittent character of the pain, I was induced to consider the disease as complicated with neuralgia. I therefore examined the spine, and found that even slight pressure over the second and third dorsal, and the first and second lumbar vertebræ, occasioned exquisite pain. The patient being so exceedingly nervous, I was afraid to propose attacking both parts at once, so ordered eight leeches to be applied between the shoulders. On the following day the tenderness of the upper portion of the spine was quite gone, and the pain at the elbows much relieved, excepting when subjected to extensive motion. The swelling still remained. I now ordered eight leeches to the lumbar region; the next day, pressure over the dorsal vertebræ occasioned no inconvenience, and the pain in the knees and ankles was nearly gone. Sulphate of quinine was now added to the colchicum, and the other medicines remitted. On the second day, diarrhœa set in; the colchicum was therefore omitted, and a little laudanum added to each draught. The diarrhœa soon subsided, and the disease was then subdued, but much weakness and irritability remained. By nourishing diet and alterative and tonic medicines, the patient was restored to his usual state of health, in about a fortnight.*

Painful affections of the back and joints, and in fact, all chronic pains that did not admit of easy explanation, have long taken refuge under

the broad shadow of the term rheumatism. But the enlightened attention, with which all diseases have been studied of late years, has enabled us to remove several of them into more appropriate quarters, and some affections, that would formerly have been considered as rheumatic, are now known to be neuralgic. Some writers have even gone so far as to consider rheumatism, as the result of mischief in the spinal chord, and that thus only can its erratic character be accounted for.

The above case is interesting, as shewing that both rheumatic and neuralgic affections may exist simultaneously, and as the latter, which are often the most painful, may be speedily removed by prompt and judicious treatment, it is highly important that the fact should be borne in mind in forming our diagnosis.

*Remarks on Mr. Uvedale West's Paper
on the Influence of the Nerves,
over Muscular Contractility.*

THE accumulation of theories to explain physiological phenomena, is a daily increasing evil, and one that so obscures the fair path of science, that the student is perpetually led away from it by the ignis fatuus light of these fanciful hypotheses, which involve him in labyrinths, without furnishing him a clue for his extrication. To check these parasitical growths, and divert the vital current into its proper channel, is one of the most valuable avocations of the periodical press, and is one among the many causes of gratification, with which I hail the appearance of your admirable journal. Impressed with these views, I venture to offer for your consideration, the following remarks on Mr. Uvedale West's paper on the influence of the nerves, over muscular contractility, published in the first number of your journal.

* Hysteria in a man of fifty years of age, is not of frequent occurrence, but the symptoms were too clear to be mistaken, and it may be remarked that the patient, who judged chiefly from his sensations, considered the mucus in his urine to be semen.

Mr. West adopts the doctrine of inherent muscular contractility; he considers contraction, as the natural state of muscle, and relaxation as resulting from nervous influence, restraining their natural tendency, and he adduces the following facts in support of the truth of his theory.

1st. The co-existence of spasmodic action with nervous debility; 2dly. the efficacy of stimulants as anti-spasmodics; 3rdly. the relaxation of muscle, without antagonists; 4thly. the contraction of a muscle when detached from the body; 5thly. the tonic contraction of the stiffened corpse.

These facts appear to me to admit of very easy solution, without inventing any new theory for the purpose. The co-existence of spasmodic action with nervous debility, results from the impairment of the governing power, and the efficacy of stimulants in relieving that state, consists in their invigorating that power. The fact of muscles without antagonists contracting, is accounted for by the common explanation, viz. that relaxation is the natural or quiescent state of muscle. Muscles contract when removed from the body, because the nerves are removed with them; but if the influence of the nerves is destroyed by narcotic poisons, no contraction will ensue. The tonic contraction of the stiffened corpse is merely that which all bodies undergo on cooling.

Mr. West has pressed the opinion of Sir Charles Bell into the service, but either he or I have misunderstood this author. Sir Charles Bell says, "that the vis insita loses the exciting power of the nerves, and then palsy ensues; or losing all governance of the nerves, the vis insita, acting without the regulating power, falls into partial or general convulsions." That is, I conceive the muscles losing their contractile power, palsy ensues, or the contractile power ceasing to obey the stimulus of the will, the

body falls into general or partial convulsions.

That relaxation is the passive state of muscle, is sufficiently shewn by the fact that paralysed muscles are always relaxed. In Sir Charles Bell's work on the nerves, numerous cases are cited, but it will be enough for my present purpose to mention one, viz. that of the coachman, who having one side of his face paralysed, when he whistled, his mouth was drawn into the middle of the sound cheek. According to Mr. West's theory, the mouth should have been habitually located in the paralysed cheek.

Mr. West observes, that the restraining influence is not derived from the brain, but exists in the extremities of the nerves, even after they are detached from the body; and he refers to the effect produced by applying narcotics to the trunks of nerves, by which they become incapable of being excited by stimuli applied above the injury, but are readily acted upon by stimuli applied below it.

Dr. Charles Henry, in the January number of the *Edinburgh Medical and Surgical Journal*, has related a series of interesting experiments to elucidate this subject, and he found that by applying stimuli to the divided trunk of a nerve, motion was excited; but when narcotic poisons were applied to the sentient extremities of nerves, muscular contraction could not be excited, even by galvanism. Thus it is evident that the muscles have no contractile power independent of nervous influence.

Mr. West dilates on the beauty of the contrivance which he has described, as producing muscular action. Thus, says he, are we enabled to account for the active dilatation of the auricles of the heart. But does this active dilatation exist? 'This should be shewn before we talk of the beautiful contrivance by which it is accomplished. According to Mr. West's hypothesis, the nerves are kept in a constant state of exertion, to restrain

the action of the muscles, and muscles to overcome the restraint exercised over them by the nerves. This is certainly one of the clumsiest contrivances that ever nature was accused of, and had she employed it in forming "this paragon of animals," might well justify the literal application of the song—

"Her prentice hand she tried on man."

But nature is not thus wasteful of her power in her works, the means are always apportioned to the end, and to this rule muscular action forms no exception. When muscles are not in action, their state is one of rest, and when they have been too long exerted, fatigue indicates the necessity for repose.

E.B.

Westminster Medical Society.

Saturday, March 3, 1832.

Dr. SIGMOND, in the chair.

Existence of Epidemic Cholera in London last August—Non-identity of disease with Cholera of India—Marvellous cases in Mary-le-bone workhouse—Further Exposure of the Central Board of Health.

MR. Walker related the case of his late partner Mr. Wright, which was strictly similar to the disease now prevalent, and as fatal, as it destroyed his friend in a few hours.

Dr. Copland referred to numerous authors, and the Reports of the Indian Precidencies, in proof of the non-identity of the cholera of Jessore, which appeared in 1817, with the disease known in India previous to that period. He found that diarrhoea preceded, and consecutive fever, followed the disease of 1817. He argued that this disease has spread from Asia to continental Europe, and formally to this section of the empire:

he thought it was a pestilence, but did not think it contagious: he found strong facts in favour of the last opinion in cases that occurred in the same district at Limehouse, which seemed traceable to the first affected: he did not observe any of these cases.

Dr. Johnson was happy that Dr. Copland agreed with him in the opinion, that the disease now in London was not Asiatic cholera. He then related facts relative to 16 cases admitted into the Mary-le-bone workhouse, which were reported as cholera, though he, Dr. Sigmond, and even Dr. Daun, denied that they were cases of that disease. They were examples of fever dependant on gastro-enteritis: they resembled the early stage of eruptive fever, and a pustular eruption was on the arms of one of the children.

A Gentleman commented, with great warmth, on Dr. Johnson's letter in the *Times*.

Mr. Winslow was of opinion, that the arguments of the non-contagionists fell to the ground. It was denied that De Foe's authority on the plague could be received, but Dr. Hodges went to the same extent: he believed that all admitted the contagiousness of plague, yellow fever, and eruptive fevers; but Dr. Gregory was of opinion that the contagion of small-pox could not be traced in one case in 20, and no one would deny that the disease was contagious.

Dr. Sigmond felt himself called on to make a few observations, as he fully agreed with Dr. Johnson's account of the cases in Mary-le-bone workhouse. The collapse appeared to him to bear a close resemblance to that of the cold stage of ague, or the collapse of typhus. These little girls had had a holiday, and a small trifle of money given them, with which they indulged themselves, by purchasing walnuts. He was once a contagionist; but his reading and observation proved to him the fallacy of that side of the question. (*Cheers.*) As to De Foe's work on the Plague, it was not worth a straw,

he would as soon quote one of Sir Walter Scott's novels. Dr. Hodges was authority, but still it was to be recollected that three ships had arrived from the Levant just before the appearance of the plague. It appeared to him that there was no analogy between plague and cholera.

Mr. King rose to make a few remarks on the explanation of Mr. Paulet Thomson with respect to cholera. His excuse, that if the Government declined to issue quarantine regulations, they would be accused of acting unfairly towards foreign powers, whose ambassadors would state the real nature of the case. He (Mr. K.) considered that the seventy-three eminent medical men who had signed the petition, and sought for a public inquiry, were entitled to more attention. As an Englishman, he protested against the refusal.

Dr. Fergusson rose to order, and observed that whatever our political opinions might be, a scientific society was not the place to discuss them.

The President decided that Mr. King was out of order.

Mr. King, seeing a gentleman from Mary-le-bone in the room, begged to inquire his opinion on the cases alluded to; he meant Dr. Gregory.

Dr. Gregory observed that he was a resident of the parish in question, but had nothing to do with the workhouse,

Mr. King further inquired of Dr. G. the symptoms of the child in James Street, which was reported as real Asiatic cholera. (*Great Laughter.*) A long pause ensued, when the President said Dr. G. was not bound to answer the question unless he pleased.

No answer was given; and for the reasons stated in our last report of the London Medical Society; by which it appears that the case was no cholera at all.]

Dr. Webster said that he had seen

such cases very frequently among children.

Mr. Hunt contended that there was no evidence whatever of contagion; and that those who advocated it, had done incalculable mischief to the trade, commerce, and millions of human beings.

He believed the prevailing disease, arose from a particular constitution of the atmosphere.

Dr. Gaskin defended quarantine regulations.

Dr. Gilkrest denied that there was the slightest evidence in proof of contagion, and could not admit the proofs adduced by Dr. Copland.

A gentleman observed, that the pustular eruption, was bastard itch, and was often seen in the workhouse.

Mr. Fisher denied, that Dr. Sigmond had compared the cases in the workhouse to the cold stage of an ague, while there. Dr. Sigmond replied, that he had done so, to Dr. Johnson and Dr. Daun.

Dr. Copland replied, and the society adjourned.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

On perusing a late number of your able and scientific journal, my attention was drawn to an inquiry made of Dr. Ryan, by a gentleman at the London Medical Society, respecting whether Dr. R. or any other gentleman then present, had employed iodine in cases of chronic enlargement of the tonsils in children, and as it appears that no information had been afforded on the subject, I would beg leave to mention, that I have met with several such cases in which I prescribed iodine with the most beneficial effects; the unnatural enlargement of these glands having completely

subsidised under the use of this valuable medicine. In a second paper which I read on the efficacy of iodine in deafness, at the Medical Society of Gerard Street, I stated two cases in detail of chronic enlargement of the tonsils in children, accompanied with deafness, in both of which the reduction of the glands, and restoration of the sense of hearing were accomplished. A very interesting case of congenital enlargement of the tonsils in a child six years old, is related by Mr. G. Smith, in the *Lancet* of Saturday, Jan. 8, 1831, where the tonsils were so large as to occupy the whole of the posterior arch, pressing upwards the velum pendulum palati, and exciting frequent retching and a sense of suffocation, but which was perfectly cured by iodine. Mr. Wright, an eminent aurist, of London, also speaks of iodine in this disease, as a beneficial remedy.

I remain, Gentlemen,

Your obedient Servant

M. D. DARWIN.

Feb. 21, 1832.

ANATOMY BILL.—HOSPITAL FEES.

To the Editors of the London Medical and Surgical Journal,

GENTLEMEN,

ANY legislative measures on the subject of dissection, any enactment for the purpose of preventing the repetition of the revolting crimes which have been lately brought to light, both the profession and the public were prepared to receive in the most cordial, frank, and candid manner: how then do we hear on all hands so many complaints against the present Anatomical Bill? All seem to allow that Mr. Warburton and his coadjutors have been actuated by the very best motives; that the feelings, nay,

the prejudices of all the humblest and most ignorant, have been weighed well by the framers of the Bill. The Bill has however radical defects. The authors of it seem not only all abroad as to the true and only means of preventing Burking, and of the most natural and easy manner for educating accomplished practical medical men, but seem totally blind as to the certain consequences of permitting relatives and executors to dispose of bodies for the purpose of dissection. When we reflect on the crimes of Burke and Hare, of Bishop and Williams—of the depths of depravity to which poor human nature can sink—the dreadful results which must inevitably follow from an enactment for legalizing the traffic in human flesh, carried on by such wretches, must be abundantly evident to all. The crime of Burking (hitherto it is hoped a rare crime) will become one of daily occurrence, and thousands of wretched invalids, lingering out their existence in some remote or obscure dwelling, if not positively murdered, will be left in utter neglect, or rather the means of relief studiously withheld, so that on their death a few pounds may be obtained for their mortal remains. If in the upper ranks of life, unfeeling selfish sons and nephews are to be found anxiously waiting for the deaths of their fathers and uncles, that they may inherit some paltry estate, will a starving and profligate man be assiduous in procuring assistance for an individual by whose death he may be saved from perishing by want? Let it not be said that the greatness of the sum on the one hand, and the smallness of it on the other, makes any difference; a few shillings is more to a man in utter want than thousands to one in affluent circumstances. The widow could less spare her mite than the rich man shekels of gold. As to any check on dissecting-rooms being supplied by the above means by inspectors and certificates, it is utter delusion to think of them

as preventions. Medical jurisprudence is as yet too imperfect a science to hold out any hope that it can be effective. Means of procuring abortion are accessible through some wretches within the pale of the profession. Will a false medical certificate be difficult to procure? The direful effects of legalizing the sale of human flesh are so palpable, that I take no credit for, in conjunction with a general practitioner of this city, being the first to call attention to it through the medium of the newspapers; it is a source of sincere gratification to us to see it taken up with such spirit by the profession and the public. The clause must be abandoned, although I am aware that the Bill as it stands has many supporters, and who think that the checks of inspectors, and certificates, will be amply sufficient to protect the public from murder. What ignorance! I wish not to direct the attention of the profession to the very simple mode in which it has been proposed to facilitate the study of anatomy, and supply the public with efficient practitioners, which may be done in a very few words:—first “remove the large pecuniary penalties by which pupils are prohibited from attending the public hospitals.” I am satisfied if this were done, a vast decrease in the demand for subjects would instantly take place. At present, during apprenticeship, the medical pupil learns nothing but a little pharmacy, the smell and colour of drugs, five of the best years of his life are frittered away—he will have acquired idle and bad habits, perhaps may have signalized himself by an intrigue with his master’s housemaid—it will be indeed miraculous if has done so in a more honourable manner. At the close of the fifth year he goes to London or Edinburgh the greater part of his time, is of necessity taken up in dissecting; he has little leisure to attend lectures which are delivered on different branches

of the healing art by distinguished teachers; but open the hospitals to pupils during the latter years of their apprenticeship, remove the enormous exactions in the shape of fees, for the privilege of attending them, and the most beneficial results would be the consequence; not only would the treatment and symptoms of diseases be learned, but a vast amount of anatomical knowledge would be acquired; when limbs are amputated, the mechanism of the leg and arm might be taught, during the ordinary post mortem examinations of those who die; the anatomy of the brain, chest, and abdomen might be acquired, aye, in a much more perfect manner than can be done in a dissecting room, independantly of coupling symptoms during life with appearances after death; much too, of surgical anatomy, and many operations might be learned, and all without materially disfiguring the body. A student thus trained, when he went to either metropolis, would require comparatively little practice in dissecting, and would have plenty of time to attend the lectures delivered by the masters of his art, to digest these lectures and to profit by them.

By your permission I will return to the subject, and endeavour to give some idea of the manner in which the regulations of the provincial hospitals have been formed, and the arguments, if arguments they can be called, by which the enormous exactions of money from pupils (the cause of Burking and bad surgery), for the privilege of attending the hospitals, is defended.

M. D. EDINENSIS.

Tything, Worcester,
Feb. 28, 1832.

Habit.—The unconquerable power of habit in all animals, from man to the lowest reptile, forms a curious subject of moral speculation. The princess in the Arabian tale, who was transformed from a cat into a companion for a king, no sooner saw

a mouse enter the apartment than, forgetting her regal state, she pounced upon the prey, and proved herself to be as fond a devourer as ever of mice.

Whether or not these remarks may furnish a key to the motives which have led to the following paragraph, taken from the last number of the *Lancet*, we must leave to the discerning reader. "The *conversaciones* at the *College of Physicians*, were resumed on Monday evening last. It was an insipid affair. SIR HENRY HALFORD, in the hope of making the performances attractive, indicated in language not to be misunderstood, that an essay on the 'new disease' would be highly acceptable."

It would be hardly possible to imagine a grosser misrepresentation of the fact, than is to be met with in this statement. As to the "insipidity" of the "affair," that is all matter of taste; but for our parts we have never seen a more brilliant meeting in our lives, assembled on any occasion connected merely with the interests of science. Again, we must beg leave to say, that we never witnessed interest more universally or more unequivocally displayed, than by the large assemblage present during the reading of the very valuable account of the certain plagues, furnished by the Dean of Westminster.

Now with respect to what is stated as having been "indicated" by Sir Henry Halford, we have to observe that this is a mere *Wakleyana*, and Sir Henry's precise words were, "Gentlemen, it is highly desirable that as a companion to this excellent account of contagious diseases, we should have an equally elaborate one on epidemic diseases, and I am sure the College will feel obliged by such a communication from any gentleman present."

Any lecturer of the day on physiology, who desires to illustrate, by familiar practical demonstration, the nature of the power of *refraction*,

has only to remind his hearers of the curiously oblique position which truth always assumes in the medium of the *Lancet*.

NOTICE TO CORRESPONDENTS.

A. B. Contempt, indeed from such a quarter—Capital!—The modesty of a Journal, which is entirely supported by subscriptions advanced by monopolists and corruptionists, in attacking the public press, and accusing it of selfishness, disgraceful conduct, and worthlessness, for exposing the crooked policy of alarmists, must elicit the good opinion of all thinking men. As to its prognostication of our speedy demise, we can only reply, that in five short weeks we have exceeded its circulation:

Hinc ille lachrymæ.

We are not the advocates of a party, but of every member of the profession. We do not bite the dust, and crouch to corruptionists; we did not laud the first Board of Health, and abuse the second, because less powerful and less influential; nor are we obliged to swallow our own words daily, like others. We never were contagionists, and never recanted as soon as the tide of medical and public opinion ran against us. Those who have published their recantation, and who, under the dastardly mask of Anonymous Rustics, make violent personal attacks on those who differ from them in opinion, deserve the scorn and contempt of every independent and enlightened member of the profession.

Some eminent individuals say to us "pray avoid personalities;" and others exclaim, "unless you are spirited and piquant, you will be like a certain Journal, and cannot succeed." We agree with the former, and deeply regret there are disciples of the satirical school, among the conductors of the medical press, whose baneful example must be followed, to some extent, by their rivals. For ourselves, we detest personalities, because they are proofs of little minds, and characteristics of all ignorant and bad reasoners.

ORDER OF THE PRIVY COUNCIL, MARCH 6th, 1832.

A PROCLAMATION has just issued authorising Boards of Health established, or to be established by order of the said Council, to apply, request, and desire parish officers to call meetings for the purpose of establishing cholera hospitals in infected districts, or in those likely to be infected, and the expense of the same to be ordered by the next magistrates, and paid from the parish rates.

London Medical and Surgical Journal.

No. 7.

SATURDAY, MARCH 17, 1832.

VOL. I.

St. Thomas's Hospital.

CLINICAL LECTURE,

DELIVERED BY

FREDERICK TYRRELL, Esq.

March 10th, 1832.

GENTLEMEN,

THE cases and operations which have occurred during the week are of considerable interest. The first patient was a person, who had enjoyed pretty good health. A man, 22 years of age, was admitted into the hospital, under the care of Mr. Tyrrell, with a tumour situated on the outer part of the thigh; it appeared very tense on pressure, which induced Mr. T. to suppose it to be steatomatous. It presented a globular appearance, and had increased very slowly, without causing any pain, to about the size of a lemon. He first observed it about four years ago, when it was about the size of a pea, and attributed it to his having taken cold. From that time it had gradually increased to its present size. Mr. T. commenced the operation by making a simple incision in the direction of the axis of the thigh, having found that a direct incision interferes less with the cicatrization of the parts, than an oblique one. On dissecting out the tumour, the greater part of it was ligamentous; and it was found to be of the malignant nature, which ultimately leads to fungoid disease. Very little hemorrhage took place during or directly after the operation; but about half an hour after it came on profusely, and was stopped by the application of a ligature on the bleeding vessel. Some of the *lic. opii. sed.* was given to the patient, and he was put upon arrow root diet. About eleven o'clock on the sixth of the month, four days after the operation, profuse bleeding took place from the nose, to restrain which it

was found necessary to plug the posterior part of the nares. The next day his pulse being quick and compressible, he was ordered *tinct ferri muriat m, xv: tinct opii m, x; camphor mixture 3 xij.* The wound is still open, and the constitution is weakened by the loss of blood from the nose. Mr. Tyrrell has no doubt but that the disease will return in some other parts of the body, although at present he has no reason to believe that such is the case; but from experience he has generally found that such malignant diseases are apt to return. He has seen the same disease adherent to the fascia, and to the fibrous tissue on the back part of hand and foot. As soon as the patient gets better, the plan of treatment that he intends to adopt, is to put him under an alternative course of medicine, and send him in the country, providing his means allow of it. Mr. T. here related a case of a similar disease, that occurred to him in private practice, which got well under this mode of treatment, and has not yet returned, although five years have since elapsed. He remarked that the following case was of great interest:—James—, a labourer, thirty-three years of age, was admitted into St. George's ward on the 22nd of February, with strangulated hernia on the right side. It had been originally caused by an accident, and he had worn a truss for two months; but at the expiration of that time, believing himself to be well, he left it off. Since then the hernia has descended a number of times, and he has always hitherto been able to reduce it himself; but on the day of his admission into the hospital, not being able to do so, he applied here for assistance. When admitted the taxis, together with the warm bath, were employed, and the hernia was with difficulty reduced; after which an ounce of castor oil was ordered to be given to him. In the course of the evening it came down again; and the taxis having again been employed without effect, he was bled to the extent of three pints, until fainting was produced; the taxis being then applied, the hernia was again reduced. He had no pain about the

tumour; but on pressing on the abdomen, he complained of pain, for which thirty leeches were applied, and his bowels not being open, an enema was ordered. The next day, and on Saturday night, he slept and appeared better; but on Sunday Mr. T. was sent for to see him, and the symptoms of hernia had returned with more violence than before. From its repeated descent he was induced to think that it was a small portion of the omentum which formed it; but on more attentive examination, no hernia could be found: there was pain on slight pressure over the abdomen, and the pulse was that indicative of peritonitis. He, therefore, for this disease ordered him three grains of calomel, with one of opium, to be taken every three hours, and twenty leeches to be applied to the abdomen. The next day, when Mr. T. saw him, the bowels had been open, the abdomen continued tense, and there was pain on slight pressure; twenty more leeches were ordered again to the abdomen, and the calomel and opium to be continued. The mouth becoming affected, the medicine was diminished to two doses in the day; on the 7th of March the peritonitis had subsided, and the patient becoming convalescent, the dose was again diminished to one grain of calomel, and half a grain of opium, night and morning, which was continued for a short time, to prevent a return of the complaint.

Now, in the first place, the hernia was reduced by the taxis and warm bath after an elapse of half an hour; but the second time it was accomplished with more difficulty, owing to the inflammation and adhesion which had been caused by the application of the taxis. When Mr. T. saw him on Sunday, the abdomen was tense; there was pain on slight pressure, and the bowels were confined; and the vascular system presented the characters of peritonitis. He then put him under calomel and opium. As soon as the mouth was affected, the peritonitis ceased, and the patient is now in a convalescent state.

The following is another case of equal interest:—A boy was brought to this hospital between four or five years of age, who had first retention of urine, and was under the care of his medical attendant. In endeavouring to introduce an instrument, the practitioner detected a calculus in the urethra; and the instrument being pressed against this calculus, moved it, and allowed the urine to flow. As he was anxious that the stone should be removed, directed him to this hospital. The child had at that time no retention of urine: but still the stone was likely to lead to mischievous results from an increase of size. Fearing that if an incision were made into the urethra, through the lax cellular texture, about the scrotum, infiltration and consequent sloughing might ensue, Mr. T. procured a small instrument invented

by Wiess, intending, if possible, to grasp the stone, and by this means extract it. For this purpose he got some of the smallest size; but on introducing them they occupied the whole of the urethra, which was too small to allow of their dilatation. He then procured some small forceps with long narrow blades, and with these could grasp the extremity of the stone, but could not extract it, owing to its being partly encysted. Mr. T. then consulted his colleague Mr. Green, whose opinion coinciding with his own, Mr. T. decided upon making an incision on the anterior part of the scrotum, about the median line; which he performed, and by that means extracted the stone. The stone was convex on its upper surface, and one side of it had become grooved by the passage of the urine over it. Very unfortunately the stone has been mislaid, which is to be regretted, as it shews the efforts of the urine to overcome any obstacle in its passage. The little boy has been going on well since the operation; the greater part of the urine passes through the urethra, and a small quantity through the wound. After making several observations as to the propriety of always having in our possession these small instruments, Mr. T. related the following case:—A gentleman called upon him just as he was coming from the surgical lecture, and requested his assistance for a patient, the subject of stricture, who, in attempting to pass a bougie into the bladder, broke it off, leaving a portion to the extent of three or four inches in the urethra. Mr. T. was requested to see him, as the gentleman supposes that it would require incision to remove it. Mr. T. desired him to get the forceps before-mentioned, and by means of these the bougie was extracted. The learned lecturer here described the mode of using these forceps, and added that the introduction of the blades will be greatly assisted by gently pressing on each side of the urethra externally with the fingers.

St. Bartholomew's Hospital.

SELECTIONS

FROM THE LECTURES DELIVERED BY
WM. LAWRENCE, Esq., F.R.S.
During the Session 1831—1832.

Diseases of Joints.

DISEASES of joints, Gentlemen, are generally inflammatory, attended with the usual symptoms of inflammation, which lead to the formation of matter. In this stage of the

disease we must, of course, resort to the antiphlogistic means; and in another stage, to counter-irritation. The inflammation in these cases is often chronic; as "white swelling," for instance, which means the enlargement of a joint without inflammatory symptoms. This may occur in almost all textures of the joints, and it is exceedingly difficult and tedious to manage.

Inflammation of the synovial membrane, is, perhaps, one of the most common in the knee-joint; it is attended with increased exhalation into the joint; and causes swelling, which is easily detected, and also a little pain; and it is here necessary to state that the synovial membrane, when inflamed, is not so painful as serous membranes. It is accompanied with inflammatory symptoms; redness, heat, slight pain, and tumefaction; stiffness, and inability to use the limb, are generally the first symptoms. The swelling is much greater where the membrane is less tense, and fluctuation is evident. The most frequent causes are injury of any sort, blows, falls, sprains, &c.; exposure to cold is also a frequent cause; particularly in persons of rheumatic habit, who have been affected with gonorrhœa. I have seen this the case very often in my private practice, where gentlemen of rheumatic habit, who had gonorrhœa, become the subject of this disease. In treating this affection, we must first of all try to subdue inflammatory symptoms by taking blood from the joint by means of cupping, or leeches; the former practice might be more efficient in young plethoric persons; cold applications also might be used with success; but if the part be tense, warm fomentations will prove much more grateful and better to the patient than the former means. The inflammation having subsided, we must then employ counter-irritation by liniments, blisters, setons, moxas, &c. The synovial membrane very often becomes the seat of chronic inflammation, and then bad consequences will arise if the practice is not active. Inflammation and suppuration often supervene, and will so materially injure the patient's health as to compel the surgeon to have recourse to amputation. It commences with a puffy elastic swelling; and as the limb is extended, great pain is felt; the inflammation terminates in suppuration; abscesses point externally, and we must then remove the limb. After amputation, we find the synovial membrane thickened to a great extent; and we also find matter in the cavity of the joint.

Cartilages of the articulations are also often liable to disease; it commences with ulceration, which continues; no attempt, as it were, being made towards cicatrization; consequently all the surrounding soft parts become affected, and are quite destroyed. It also extends in the course of time to the bone, which becomes carious, and though the

process be slow, it will effectually destroy the patient's health.

The best way, perhaps, of detecting caries of the bone, is by passing a probe through the opening, made by the suppurative process, and by gently moving the probe, the bone will be distinctly felt to shake, or move, as it were under the instrument; dislocation is often a necessary consequence of this disease. The cartilages having been destroyed by suppuration, the muscles around the part will easily draw the limb out of its place, and cause deformity to an astonishing extent. The disease is generally ushered in by severe pain; particularly when the limb is exercised or extended; slight swelling may be present, but in some cases no tumefaction exists, and the pain is greatly increased by pressure on the articulations. In these cases, sometimes a natural cure is affected by ankylosis after the joint is entirely destroyed. This was well shewn by the preparations on the table, one of the elbow, and the other of the hip-joint. The pain which is attendant on this disease is not a sign of inflammation, and cannot be removed by the antiphlogistic regimen. Counter-irritation in these cases is very beneficial, and it is in such cases that the actual cautery has been recommended, but it is now very seldom employed, having fallen greatly into disuse. Perfect rest of course is necessary, and not on any account to use the affected limb. Amputation, however, is often preferable to a long train of bad symptoms, though, if the individual be able to procure comfort and rest, the disease would no doubt be cured without removing the limb.

Another affection commences in the bone, and which is common in persons of strumous or scrophulous constitution, and which disease is more frequently seen in young delicate children. The diet in these cases is the principal and best means of cure, which should be nutritious and easy of digestion. Slight antiphlogistic means and counter-irritation should also be employed, but in those persons who are weak and emaciated, these means, if used too much, might prove detrimental, instead of advantageous. However, if the person be removed to pure country air, or the bracing air of the sea side, and attending, at the same time, to the general health, the disease might be entirely eradicated. In many chronic affections of joints, Mr. Scott recommends a plaster of mercurial ointment with soap, to be put over the part, and after that, he applies the emplumbi, then leather, and lastly, a roller or bandage. The limb is then put into a case, which if it does not keep the limb perfectly steady, is removed, and succeeded by pasteboard. Mr. Scott has not mentioned in what form of the disease it was applicable, but recommends it as highly efficacious in the chronic stage. I have used it in a child thus affected, without success, and it brought on

such a derangement of the health, that it was obliged to be removed. It might do good in delicate constitutions, where the individual would not be able to undergo the active treatment; sometimes the mercury may seriously affect the constitution, and it is more than probable it was that which affected the patient, in whose case I applied it.

Loose Cartilages of Joints.

We cannot explain how this disease forms; all we know is, that cartilages become loose, and cause such irritation and inconvenience, often preventing the person from using the limb, and compelling the surgeon to afford relief, and which is effected only by excision. No pain or inconvenience, however, is experienced, unless these substances get between the bones, when they produce great irritation, and on the patient endeavouring to walk, he falls, in the most excruciating agony. A bandage, or knee-cap, may prevent their moving. But if they get between the joints, they will cause such annoyance, that you must excise. This is done by bringing the skin over the loose bone, making an incision, and extracting it. That done, you bring the wound together, and apply cold to prevent inflammation, and treat it as ordinary. Mr. Lawrence exhibited two preparations of this description, which were removed from the knee, one in private practice, the other in the hospital.

Injuries of the Head.

We now come, gentlemen, to injuries of the head, an every-day occurrence among the lower classes. Injuries of the head may be attended with an external wound, or may not. When erysipelas comes on, which is very often attendant on injuries of the head, we must look upon it as a serious affection, and requiring active treatment. Erysipelas of the head requires more active treatment than the phlegmonous erysipelas of the leg, and that is owing to its situation; as from its rapid progress the brain and membranes may become involved: infiltration may be produced, mortification succeed, and febrile action ensue, and thus endanger the patient's life.

Blood-letting, to lessen the determination to the brain, will be highly advantageous, or the application of leeches; notwithstanding it has been unjustly abandoned by some.—When there is great tension, free incisions, as in phlegmonous erysipelas of the leg, will be highly serviceable, and afford the patient great relief.

Sometimes in injuries of the head, though no dangerous symptoms be present, it often turns out to be a very serious complaint, though the practitioner might have thought to the contrary. We cannot detect, or tell when there is a fracture, nor can we say when effusion of blood within has taken place.

In injuries of the head, of course the

man must be put to bed, and rest procured. The head must be shaved, and cold applied; the diet must be regulated, and, of all means, the alimentary canal must be cleared. All this is quite necessary, as it might prevent the inflammation which would ensue. If there be fracture, this precautionary treatment will be more requisite, and will be found very useful.

Fractures of the skull takes place under different circumstances. There are different fractures: for instance, you may have a line running along the skull resembling a hair, or you may have what is called a starry fracture—that is, where there is a centre, and from that centre are seen several lines proceeding from it. You may have the bones driven under each other, or you may have depressed fracture, or comminuted, that is, where the bones are broken into many pieces, or you may have indented fractures.

An external wound may or may not accompany a fracture. In fractures of the base of the skull, if the fracture extend to the temporal bone, it is not uncommon to have a discharge from the meatus auditorius externus. If there is a wound of the soft parts, the practitioner will be able to ascertain the extent of the injury done.

In *comminuted fractures with depression*, where the shattered pieces are driven in, and cause pressure on the dura mater, or brain, it will be requisite to remove them by trephining; but if all the symptoms be not present, in short, if there be not well marked comminuted fracture with depression, we must be cautious how we use the trephine. For, gentlemen, in a practice of thirty years, including my hospital practice, I have seen many a person killed by it. It is now scarcely used, though in the time of Mr. Pott, it was used almost in all cases of fracture; however, time and experience have justly done away with it.

As regards *fractures with depression*, whether comminuted or not, once they cause pressure, they must be removed. The great question to be asked in a case of fracture with depression is, whether the depressed piece of bone causes pressure, whether it will require peculiar treatment, and whether we shall be justified in using the trephine. The treatment of fractures, with and without depression, will be nearly the same. But should we be quite settled in our mind, as regards the pressure on the brain, and the necessity of elevating the depressed piece of bone, then we must do so by means of the trephine, or Hey's saw. I have seen cases where there was pressure on the brain, where the trephine was not used, and where the patients recovered. I do not remember any case in the hospital, where pressure remotely caused death, or inflammation of the brain, or its membranes. Inflammation is more likely to come on after the operation of trephining, than in those cases where it is

not performed. As I have said before, the operation in the hospital has been very unsuccessful; and in the majority of cases that happened here, I again say that I think the trephine was the cause of death, and that is owing to the result which attends the operation.

The dura mater is pushed up, and presents a dirty appearance as it were; it then ulcerates round its edges and gives way; a bloody surface in appearance is next presented to view, which turns out to be brain, and constitutes the disease called *hernia cerebri*. Depression, alone, does not justify the operation. When I was at the Hotel Dieu, in the time of Desault, trephining was so unsuccessful, that it was quite abandoned; and the result in this hospital has not been more satisfactory.

The effects of *concussion* and *compression* I have fully discussed in my clinicals, and of course need not repetition.

Hernia Cerebri.

This disease, as I have already mentioned, is generally caused by trephining, and is one of the unfavourable symptoms produced by it. The dura mater is pushed up and is quite puffy, its colour becomes brown, ulceration sets in, the dura mater becomes quite black, and gives way. When this is done, the brain protrudes, which at first is taken to be clotted blood, but which turns out afterwards to be the brain.

In these cases the termination is fatal, for as yet, we know no means by which we could restore the patient. If we slice off a portion of the brain, it will afford temporary relief, but another portion soon protrudes. Pressure is also serviceable; but here, gentlemen, you must recollect that this produces the same effect as any other pressure on the brain, and consequently we must discontinue it. I can give you no remedy for this disease. Many indeed are the remedies I have seen employed in this affection; but they have all in their turn failed, and the patients have sunk.

Medico-Botanical Society.

LECTURE

ON

MATERIA MEDICA,

DELIVERED BY

MICHAEL RYAN, M.D.

Lecturer on Practice of Medicine, Obstetrics, and Medical Jurisprudence; Professor of Materia Medica to the Medico-Botanical Society of London.

March 13th, 1832.

MY LORD & GENTLEMEN,

IN the following inaugural address, I beg leave to direct your attention to a concise

account of the origin and progress of that branch of therapeutics, termed *materia medica*, of which this society has done me the honour to appoint me Professor. As this very valuable society has among its Fellows many who are distinguished in general literature, in the whole circle of the sciences, and in the various learned professions, I shall divest the succeeding statements of as much technical phraseology as the nature of the subject will allow. I need scarcely observe that this plan is adopted in introductory lectures on all the arts and sciences.

Materia medica, or pharmacology, is that branch of medicine, which has for its object the knowledge of medicaments, or remedies, which are employed in the treatment of diseases, of their natural condition, their physical and chemical properties, their collection, selection, preparation, preservation, mode of administration, their doses and effects on the animal economy, or on one or more organs. It is difficult to assign the epoch or commencement of pharmacology; its origin is lost in the primitive ages of the world. Among all savage nations, we find traces of the use of medicinal substances, and proofs that the instinct of man and animals has been the first guide to the curative properties of medicines. This position is attested by the fact, that the first of our species was, soon after his creation, rendered liable to diseases; and as he was also gifted with the knowledge of the nature of all the things that surrounded him, he was necessarily apprized of their noxious and sanative properties. Medicine was, therefore, almost coeval with man; and must have occupied his attention in the first days of his existence. The vicissitudes of season, the varieties of climate, the influence of the circumambient atmosphere, the action of surrounding bodies, and the construction of the human fabric, must have rendered diseases nearly coetaneous with mankind. The presence of bodily infirmity produces pain, and impels man to seek immediate alleviation, and to employ means for that purpose, either by instinct, experiment, or spontaneous exertion. The many accidents and injuries to which he was exposed in the early and rude ages, must have frequently obliged him to suppress hæmorrhage, to remove the deformity of dislocation, and to adjust the painful fracture. Thus necessity conceived the art of medicine, reason nourished it, long use promoted it, and experience at length completed it, and made it absolute. The foundations of this art among mankind, were first laid by chance, instinct, and unforeseen events; these were improved by the success and recollection of former experiments; the results of observations, experiments, and remedies were carefully recorded, and a comparison was instituted between events already observed, with those of daily occurrence. The sick were

exposed in the streets and high-ways; and inquiries made of passengers if they knew any remedy. The names of diseases, their remedies and events, were handed down from father to son among the ancestral traditions; and were at length inscribed on the walls and paintings of the public temples;—a system of medical instruction was formed from these sacred records, which all were obliged to follow in the cure of diseases; a law alone that was the cause of the extermination of thousands, until the healing art was practised by certain individuals, as a peculiar calling. Such was the manner of cultivating medicine in the early ages, even after the deluge, by the Egyptians, Babylonians, Grecians, Germans, Indians, Assyrians, Chaldeans, and Portuguese; and afterwards in the islands of Cnidos, Cos, and Epidaurus.

Ancient medicine, like all the early transactions of mankind, is a mixture of monsters, giants, demi-gods, and fables; and, therefore, I shall not trouble you with the legends and dark archives of antiquity relative to the first epoch of the healing art, except by reminding you of Ovid's allusion to Apollo, as the inventor of physic, in the following lines, which now grace the armorial bearings of our society of apothecaries:—

“*Inventum medicina meum est, opifereque per orbem
Dicor; et herbarum subjecta potentia nobis.*”

The history of the ancient Egyptians offers us evidence of the knowledge this people had of compound medicines. According to Pliny and Dioscorides, the Greeks, Romans, and Western people, were unacquainted with pharmacy, until after the Egyptians. It was to this people, according to the same authorities, that Moses and the Hebrews were indebted for their knowledge of chemistry; though it is more probable, that the Chinese, who were before all nations in civilization, had a knowledge of pharmacy long anterior to the worshippers of Isis. Herodotus and Strabo maintain that the Indians, Assyrians, and Chaldeans, were the first compounders of medicines. The first pharmacist of whom history makes mention, was Ching-Nong, Emperor of China, and contemporary of Mahes, first king of Egypt, who died A. C. 2699. This prince published a history of plants, still known under the title, *Herbarium of Ching-Nong*, in which he gives analyses of various remedies, describes the mode of making extracts and decoctions; and advises that his prescriptions should be employed with due caution.

Galen informs us that Hermes, the pupil of Mercury, and master of Esculapius, had prepared certain oils, opium, bolus Armena, alum, nitre, muriate of ammonia, red oxide of iron, and litharge (*De Composit. Med.* lib. 5, c. 1.); and, according to Pliny, the followers of this demi-god prepared purgative

potions from plants, and precious ointments, which were imitated by the Egyptians in embalming.

The history of pharmacy of the Egyptians, Greeks, and Romans, cannot be separated from the history of medicine and of the priesthood, as the physicians and priests prepared and administered medicines.

Melampus was the first among the Greeks who employed hellebore for the cure of the insane, in the cases of the daughters of Prætus, King of Argos. Pharmacy was not, however, always confined to princes; for we find many celebrated princesses practised it: Aspasia, mistress of Cyrus and Artaxerxes, Artemisia, queen of Caria, Agnodice of Athens, the beautiful Cleopatra, Circe, and Medea, were pharmacopolists; and from the earliest ages we find evidence that sorceresses administered pharmaceutical preparations. Le Clerc informs us in his *History of Medicine*, that Herophilus, who flourished 750 years before this era, was the first to arrange and classify medicines, and to define their properties. But the first authentic reference to the *materia medica* is in the life of Solomon, a monarch who was conversant with all vegetables from hyssop to the cedar of Lebanon. The first medical account of this branch of the healing art is in the works of Hippocrates, the father and the founder of physic, who flourished 460 years before the era of the human redemption. This was the author who first separated the healing art from the study of religion and philosophy, and reduced the chaos of his predecessors to an useful and liberal art, to a noble and dignified profession. He it was who first gave it the air of a science; he found it a skeleton, and clothed it with flesh, colour, and complexion; he embraced the cold statue, which by his touch became life, sense, and beauty; and his voluminous works survive the vagaries which pass through the crude minds of many giddy innovators. It is really astonishing to observe the vast number of our remedies mentioned in his writings. On referring to his list of the *materia medica*, we find not only almost every medicine in our pharmacopœias in its natural form, but numerous others, which are still employed in foreign countries. It is true he did not arrange his remedies methodically, but he names them in his disquisitions on the treatment of diseases.

Democritus, the contemporary of Hippocrates, travelled into Egypt to learn the physics, chemistry, and pharmacy of the people; and here it must be stated, that the Greeks partly derived their pharmaceutical knowledge from the same source, and partly from the Arabians, whose multiplication of formulæ gave origin to polypharmacy. History also attests that the Grecian heroes and demi-gods prepared medicines, as Achilles, Hercules, Chiron, Machaon, and Podalirius. About this period the prophets practised the

healing art: Benhadad, king of Assyria, consulted the prophet Elisha about the issue of his disease, and Elias restored the son of the widow of Zarpatha. This occurred about 430 years before the time of Hippocrates. Theophrastus, who flourished A.C. 381, was the founder of medical botany. He was succeeded by Dioscorides, who wrote an original work on materia medica. Celsus and Aræteus appeared in the first century; Galen, in the second; and Soranus, who discovered lithontriptics, in the fourth. Between this period and the eighth century, the Arabians kept pace with science; for we find that Geber discovered distillation, while Mesue, Serapion, and Rhazes, who flourished in the ninth century, successively enriched medicine by the introduction of various remedies. In the twelfth century Abi Oshia, an Arabian, gave an account of 300 Mahometan writers on medicine, most of whom were obscure; and during this period also, the western remedies were transmitted to Europe by Alchindi, Averrhoes, Abenbitar, and Aberguesit.

In the thirteenth century the medicine of the Arabians was introduced into Europe by Sylvaticus, Myrripsus, Platearus, Cuba, Hermolaus, Arnold de Villeneuve, Raymond Lullius, &c. The Arabian alchemists had discovered the mercurial and antimonial preparations, the acids, and salts; but rendered them of little value, by their absurd theories. From this time to the discovery of printing, in 1440, all the sciences were involved in impenetrable darkness. In a few years after this brilliant and unparalleled discovery, our distinguished countryman Linacre appeared, and was the founder of the Royal College of Physicians, as also did Cornaro, Sylvius, and Paracelsus. This last physician has been appropriately designated the prince of empirics, inasmuch as he carried his alchemical reveries so far as to boast of having discovered the elixir vitæ, which was to render man immortal; and as positive proof of the value of this discovery, it is right to state that the author died a beggar, in an hospital, in the forty-seventh year of his age. A host of illustrious physicians, surgeons, and botanists appeared in the sixteenth century, among whom was our illustrious countryman Dr. Harvey, who discovered the circulation of the blood, and threw more light upon the nature of diseases than all his predecessors, from the time of the immortal Hippocrates. About this period also flourished Riverius, Huxham, Wharton of Oxford, and Highmore, whose names will be remembered while medicine is cultivated. Though digressive and tedious, I cannot but mention our countryman Thomas Willis, the founder of the Royal College of Surgeons, and his contemporary, the British Hippocrates, Thomas Sydenham. But to return from this digression, for which I beg once more to apologise,

I have to mention as the pharmacæutists of this period, Lemery, Homberg, Geoffroy, Glauber, Kunckel, Gelener, Schroder, Wedlius, Juncker, Dippel, &c. Pharmacy was at length rendered a positive science, by the grand discovery of pneumatic chemistry made by Priestley, and adopted by Lavoisier, Bertholet, Monge, Laplace, Guyton-de-Morveau, and Fourcroy; who were succeeded by Rouelle, Baumé, Bayen, Model, Pitt, Spielman, Cadet, Neuman, Scheele, Black, Higgins, Davy, Duncan, Magendie, &c. I have already trespassed too long upon the patience of the society with this tedious epitome of the progress of materia medica, and shall now conclude this part of the subject by stating, that towards the termination of the thirteenth, or commencement of the fourteenth century, physicians renounced pharmacy, and confided it to their pupils, which gave origin to the patronage which physicians have shewn for a long time towards apothecaries.

Medicines are bounteously supplied from the three great kingdoms of nature—the vegetable, the mineral, and the animal. The science which treats of these kingdoms is natural history, which is subdivided into botany, mineralogy, and zoology. Natural history, though a vast science, is but a division of natural philosophy, which includes the knowledge of all existent beings which are capable of affecting our senses, and embraces, 1, physics, or the general laws which govern and maintain the order and harmony of all bodies collectively; 2, chemistry, which explains the elements or proximate principles of bodies, and their action on each other; 3, anatomy and physiology, which explain the structure and functions of all living beings; and 4, astronomy, or the study of the immense bodies placed above the earth and the atmosphere.

It may be stated that the earth and its innumerable productions, those on its surface and in its substance, the ocean, the atmosphere, and the innumerable objects these contain, contribute largely to our therapeutical agents, or to the materia medica. The medical faculty may therefore exclaim with the poet—

“Quæ regio in terris, nostri non plena laboris.”

The materia medica is supplied from every range of the creation, and extends from matter to space. The objects which engage the attention of the therapist, are, the properties of the sun, moon, and heavenly bodies, the laws of their uninterrupted revolutions, and various movements; their influences on climate, situation, and human health; the various productions of the earth and the waters, and the microcosm of the human body, with its wonderful organs, functions, immaterial principle, innumerable derangements, and remedies. But when he considers the boundless sources of his remedial mea-

tures, he must admit the correctness of the adage—

"Mille mali species, mille salutis erant."

The distribution of all bodies into three kingdoms, very much facilitates the study of nature, and more especially as the productions of each kingdom have been subdivided into classes, orders, genera, species, and varieties. "A medicine," says Galen, "is that which can alter our nature, and from a preternatural, reduce it to a natural condition." All medicines are derived from the ultimate elements of vegetables, animals, and minerals. They are procured from the roots, woods, barks, leaves, flowers, seeds, fruits, gums, resins, and juices of vegetables, from different parts of animals, and from earths, metals, and minerals; and all are subjected to various modes of preparation by the apothecary: such as oils, distilled waters, infusions, decoctions, extracts, mixtures, spirits, tinctures, wines, vinegars, syrups, confections, powders, pills, plasters, cerates, ointments, liniments, and cataplasms. The physical properties of medicines will not always enable us to judge of their action; though in many instances, especially in the vegetable kingdom, the colour, odour, and taste, will furnish us with a correct idea of their effects. This last position may be illustrated by a few examples. It is well known that plants whose flowers are *white*, seldom possess active properties; those whose colour is *yellow*, are generally endowed with active principles, as the bitter, such as gentian, columba, gamboge, colocynth, &c.; those of a *red* colour are acid and astringent, such as red roses, rhatany, strawberry roots, &c.; those of a *brown* colour are astringent and tonic, such as cinchona, catechu, kino, &c.: those of a *green* colour are sharp and acid; those of a *blue*, are alkaline, but if this tint is deep or glaucous, the plants are often poisonous, though there are exceptions, as in the black grape and plum. The *black* colour of plants or flowers indicates a highly poisonous property, as exemplified by belladonna, hyosciamus, &c. There are numerous exceptions, however, to the indications afforded by the colour of plants alone. Neither can the sense of taste be depended upon, though it often affords indications of the properties of remedies. The *salt* taste is common to vegetables which grow on the sea shore, and contain a large portion of saline ingredients. The *acid* taste is peculiar to many medicines, vegetable, mineral, and animal, the mineral acids being the most powerful. The *caustic* taste is also common to various productions of the three great kingdoms of nature, as acids, alkalies, lytta, &c. The *acrid* taste is peculiar to many remedies, and also the *astringent*, or *styptic*, as alum, salts of copper, iron, &c. The *bitter* taste indicates tonic, though there are exceptions, as aloes, colocynth, and nux vomica. The *hot* taste distinguishes aromatics and

spices, and indicates the existence of essential oil. The *nauseous* taste belongs to poisonous remedies, though sometimes to purgatives. The *mucilaginous* taste characterizes nutritious substances, and indicates the presence of *fæcula* and albumen. The *saccharine* taste belongs to many substances, both vegetable, mineral, and animal.

The sense of smell is also employed in discovering the properties of medicines. The *aromatic* odour is peculiar to species which contain essential or volatile oils, but capsicum is an exception. The *fætid* odour characterizes antispasmodics; the *virose* odour indicates poisons. There is an important fact with respect to odours which deserves recollection, which is, when certain medicines have lost their peculiar odour they become inert and useless.

The botanical characters of plants indicate their therapeutical properties, as in general those of the same family, possess a similar mode of action on the animal economy. The illustrations of this position, I must leave to my distinguished colleague, the professor of botany. I shall only mention that the cruciferae contain an acrid volatile oil, which is useful in scorbutic and atonic diseases; the labiatae possess an aromatic essential oil and extractive principle; the solanaceae are narcotic; the euphorbiaceae are acrid and purgative; the umbellatae and cruciferae, are distinguished by peculiar properties; the rubiaceae are generally tonic, though some are emetic, as ipecacuanha.

All substances in the materia medica, and indeed in nature, are either simple or compound; the simple are homogeneous, the compound heterogeneous, and composed of several elements.

Chemistry has enabled us to detect fifty simple substances; viz. oxygen, hydrogen, boron, carbon, phosphorus, sulphur, silicon, iodine, chlorine, nitrogen and forty metals, which are arranged under classes according to their affinity for oxygen. Ten of these substances are employed in medicine, and all may be changed in the human body, or enter into new combinations before they can act on the economy. Compound substances are divided into two great classes, organic and inorganic; the former embraces the animal and vegetable, and the latter, the mineral kingdoms. Simple substances, when combined, form inorganic compounds; while organic substances contain but a few elementary principles. In proof of this point, I may observe, that nearly all vegetables are composed of oxygen, hydrogen and carbon; while most animal substances contain those with nitrogen, and even small portions of iron, sulphur, phosphorus, &c. These are designated elementary, or proximate principles. The compound substances employed in medicine are the acids, metallic oxides, sulphurets, chlorides, and salts. The proxi-

mate principles of vegetable and animal substances are acid, alkaline or neutral; but the illustrations of these I commit to my able and highly scientific colleague, the professor of chemistry.

Medicines are combined to obtain various objects or ends; 1, to increase the action of the principal substance; 2, to lessen the action of a remedy when too violent or irritating, and to avoid certain effects, which would defeat the objects we have in view; 3, to obtain at the same time the effects of two or more remedies; 4, to form a compound, which will possess different effects from those of any of the ingredients.

As a general rule, we avoid prescribing medicines, which decompose or neutralize each other, though there are many exceptions to this rule; for example, the combination of acetate of lead with opium, of hydrocyanic acid with neutral salts, of iodine with bitter infusions, are all unchemical, but their medicinal effects are most valuable.

Medicines are prepared for use in the pharmaceutical laboratory, and are kept in certain forms called official preparations, as prescribed by the directions of the College of Physicians in their Pharmacopœia. Physicians may, however, employ other combinations in their prescriptions, and these are called extemporaneous, or magistral preparations. There are certain abbreviations by initial letters and marks, employed by the faculty in prescriptions, for dispatch and convenience, which express the quantities and doses by conventional terms. These marks closely resemble each other, and often occasion fatal mistakes, as the preparation of prescriptions is in general most improperly entrusted to apprentices. The marks for a drachm and for an ounce, bear a close resemblance, and when written in haste, are easily mistaken. The Dublin College of Physicians command their members to write the names and quantities of medicines in full. There is another feature in the laws relating to pharmacy in Ireland of deep importance, which is, that poisons cannot be sold to persons indiscriminately applying for them. The want of such a law in this country, is too well known to require further notice on this occasion. Physicians' prescriptions are written in Latin, lest patients should be alarmed, if they knew the names of many medicines ordered for them, such as arsenic, prussic acid, hemlock, nux vomica, &c. The baneful effects of these substances will be described by my learned and classic colleague, the professor of toxicology.

The time by which I am circumscribed for the delivery of this address will not allow me to notice the methods of collecting, selecting, preparing and preserving medicines, or in other words, to describe the science and art of pharmacy; but this may be learned from any of our admirable dispensaries.

I may briefly mention, that the general principles upon which the collection and preparation of medicines should be made, constitute the science, and the various operations, founded on those principles, constitute the art of the apothecary.

Some of our medicines act on particular organs, as on the brain, heart, stomach, intestinal canal, &c.; and the materia medica is classed accordingly, as emetics, purgatives, sudorifics, &c. while others supposed medicines to have specific effects on diseases, and hence arose the terms febrifuge, antiscorbutic, antiscrofulous, &c. It is now generally admitted, that the only rational classification of remedies, must be based upon the changes, effects or results, which medicines produce upon the natural functions, or action of different organs. This is what is called the physiological effect of medicine. The action of remedies is either local or general.

The local action is that which occurs in the tissue to which the medicine is applied; the general action occurs when the whole organs are affected. A vast number of remedies act first through the nerves of the part, as when spirituous liquids are taken into the stomach. The first impression is made on the nerves, which convey it to the brain, and thence it is reflected to every organ in the body. It is proved by anatomy, that every part of the body is supplied with nerves, through the cerebro-spinal system, and that all parts sympathize with each other, but in different degrees. These sympathies are great between the brain and organs of sense, as the eye, nose, tongue, ear; also between the brain and stomach; between the latter and the heart, lungs, kidneys, and generative organs. Thus it is, that increased sensibility in one organ will diminish the function in another, which strongly sympathises with it. This universal nervous connexion explains the symptoms and regulates the effects of remedies. The anatomist who knows the proximity of the origins of the nerves of vision, smell, taste, and hearing, can readily understand the reason of sympathy between all the organs which perform these functions. Thus he explains the reason why the sight of agreeable food increases the saliva, or the sound of the culinary process for its preparation acting on the auditory nerves, produces the same effects; and how the sight or smell of a disagreeable object will cause nausea or vomiting, or an unpleasant sound cause pain in the teeth, or tooth ache cause ear ache, or an unpleasant odour induce head ache, and so on. It is in consequence of sympathy that neuralgia of the face or tic-doloureux, will cause head ache or want of sleep, loss of appetite, impeded respiration, and general disturbance throughout the body. Hence it is that pain or disorder of one organ will affect another at a distance, and frequently

throw all parts into a deranged condition. A slight puncture of the finger may induce tetanus or universal spasm, and also derangement in every part of the body. I might illustrate this doctrine by thousands of examples, but I trust I have said enough to satisfy those who do not belong to the medical profession as to its correctness. It is by this principle that nature endeavours to rid herself of morbid actions or causes of disease; and the art of exciting and directing this principle, furnishes the most important doctrines in the practice of medicine. It is necessary to increase or diminish the intensity or force of sympathy, and to excite it when nature is overpowered by disease, and incapable of reaction. In our treatment of diseases, we direct our remedies to those organs which sympathize most with the affected part. As the digestive organs, which include all the abdominal viscera, strongly sympathize with each other, with the brain, organs of sense, respiration, and circulation, we find that by exciting the sensibility or increasing the function of the digestive tube, we direct nervous power thereto and diminish it in all other parts. Thus we exhibit purgatives in a vast number of diseases of the brain, eye, &c. and remove these diseases, though the chief effect of the remedy was on the intestines. It is by inducing counter-action, or counter-irritation in healthy organs, that we relieve or remove diseases, in remote, though sympathizing parts.

It appears to me that all our remedial measures may be divided into two great classes: 1, those which diminish nervous power or sensibility, that enables organs to perform their functions, and these are called sedatives or depriments; 2, those which increase nervous power, sensibility, or the natural function of parts, and these are called stimuli or excitants. In the immense number of painful disorders we find efficient aid in the internal and external use of sedatives; and we shall find upon reflection, that the greater portion of our remedies, such as purgatives, emetics, sudorifics, diuretics, errhines, expectorants, &c. are counter-irritants or excitants. Medicines act on the parts to which they are applied, and these are the stomach and intestines, the skin, the surface of the eyes, nostrils, auditory and air passages, the urethra and bladder, the uterus and vagina. Medicines act on the living body, 1, by the direct impression on the organs to which they are applied; 2, by their molecules being absorbed into the mass of blood; 3, by sympathy; 4, by contiguity of organs; and 5, by revulsion.

The direct action of medicines is illustrated by the application of collyria to the eye, or caustic to the skin. The *absorption of particles, their admixture with the blood, and their distribution to all tissues or structures*, is proved beyond doubt, by their detection in different parts. Magendie, Tiedmann, and Gmelin, have detected the odour of alcohol,

camphor, and musk in the blood of animals, to which they had administered these substances. The bitterness of wormwood is detected in the milk of animals that eat it, and the purgative taken by a nurse, will affect the infant through her milk. Vavasseur and Edwards have demonstrated the presence of the molecules of remedies in the cellular tissue, and in the parenchyma of every organ in the body, and their particles are excreted by the pulmonary or cutaneous transpiration, and by the urinary secretion. The *sympathetic* action of medicine can be readily illustrated. The remedy is applied to the part, the nerves convey the impression to the brain, and thence it is reflected all over the body. Medicines act by contiguity, as in inflammations of the abdominal viscera, we find fomentations not only relax the integuments, but often mitigate the deep-seated pain. It is upon this principle that we apply ointments and cataplasms over tumours, enlarged glands, &c. We also know that by irritating the extremity of a duct or passage, for example, the canal common to the liver and gall bladder (ductus communis choledochus) we excite the liver to act more energetically. We therefore find that a purgative which irritates the extremity of this duct in the first portion of the intestinal canal (duodenum) will stimulate the liver, and excite it to secrete more abundantly. The action of medicines by *revulsion* is exemplified in the following manner:—When an irritant is applied to any part, it excites the sensibility or supply of nervous power, as also the afflux of blood in that part; and consequently lessens both in contiguous organs. In this way the application of blisters, sinapisms, or rubefacients are highly valuable in deep-seated inflammations, as those of the head, chest, or abdomen. On this principle purgatives, by setting up an artificial disorder in the intestines, will relieve affections of the head, chest, abdomen, and extremities. Those remedies which act on the cutaneous vessels, and on the kidneys and uterus, produce their effects upon the same principle.

The effects of medicines are of two kinds: 1. the *immediate* or *physiological*; 2. the *secondary* or *therapeutical*. The physiological effect is produced by the changes that take place in the function or natural action of the part to which a medicine is applied; and is the direct impression made on the body, whether through the nerves or the absorbents.

The therapeutical effects are those salutary changes which take place in the functions of the different organs, by which disorder is alleviated or removed. The immediate effects of medicine influence all parts of the body, whether solid or fluid, in consequence of the universal sympathy, or nervous connexion of the whole, and also by the passage of the medicine into the blood.

In order to ascertain the medicinal properties of each substance, we must carefully observe the modifications produced in the

function of each organ. This constitutes the physiological effects of medicines, and these are either local or general. Thus some medicines act on the functions of digestion, circulation, respiration, secretion, and modify them; and it is upon these modifications that the curative effects mainly depend. Happily for humanity, we possess great dominion over the animal economy, in regulating and modifying its functions. "When we consider," says Dr. Spillan, in his excellent supplement to the *Pharmacopœias*, "the power which medicinal agents possess over the animal economy, we have sufficient reason to be surprised, both at its extent and its importance. By means of it the physician appears to have all the organs of the body, and their respective functions under his control. Through it he possesses manifold and valuable resources, by which, if he cannot always destroy the causes of disease, he can frequently attack morbid lesions with success, combat the prevailing symptoms which threaten to prove fatal; and by opposing a medicinal to a pathological disturbance, arrest the further progress of disease."

It is now the universal opinion that medicines do not possess specific properties, distinct from their physiological effects, and to which their curative effects can be ascribed. Hence we now write upon the nature and treatment, not the cure of diseases, as the latter is an indirect consequence of the immediate or physiological effects of medicines upon the system. It is very much doubted whether we possess a single specific remedy; and the faculty having abandoned this pretension, myriads of empirics proclaim their infallible cures for incurable diseases. "This I apprehend," says Sir Gilbert Blane, "is so well understood among well educated physicians, that the word *cure*, as applied to their own merits, is proscribed as presumptuous." *Medical Logic*, p. 259.

Such is the opinion of one of the most humane and scientific physicians of which this country can boast—of a physician whose classical and able works are an honour to our medical literature, and whose employment of vegetable remedies has effected a complete revolution in naval medicine. Every one who is acquainted with the naval history of this country must reflect, with deep regret, on the great mortality of seamen during the commencement of the last century, at which time our fleet could not keep the ocean for more than ten weeks, without being rendered unserviceable by scurvy, and our national protection was rendered extremely feeble. In the year 1780, Sir Gilbert Blane, Bart. distributed among flag officers and captains, an unpublished tract, on the improvement of the moral and physical condition of seamen. This essay was well received, and by no individual so favourably as by our most gracious and beloved Sovereign, who was then at New York. In the following year this

tract effected a total change in the state of health of seamen, by the introduction of the juice of lemons or limes, which completely prevented scurvy, and enabled the wooden walls of England to rule the waves at all seasons, in all climates, and for an indefinite length of time. Such are a few of the benefits conferred on science and humanity by this revered physician, and by means of vegetable remedies.

Those who wish to peruse a luminous view of the effects of medicines upon the living system, may consult Dr. Spillan's unpretending, though highly important little work already noticed, Dr. Paris's *Pharmacologia* and the *Manual of Materia Medica*, by Vavasseur and Edwards, translated by Davies. It now remains for me to allude to the classifications of the *materia medica*. I shall be brief upon this topic, as all arrangements, however numerous, with the exception of that based on the physiological operation of medicinal agents, are founded in error. The best is that of M. Barbier, of Amiens:—

1. Tonics or medicines which strengthen the tissue of organs.
2. Excitants.
3. Diffusibles which stimulate the tissue of organs.
4. Emollients, such as relax tissues.
5. Temperants, such as moderate the too great activity of organs.
6. Narcotics, such as diminish cerebral life.
7. Purgatives, such as irritate the internal surface of the intestines.
8. Emetics, such as irritate the gastro-intestinal surface.
9. Laxatives, such as disturb the natural movements of the intestines; and
10. Medicines, whose mode of action is not well determined.

In conclusion, allow me to observe, that of all the learned and scientific societies in this great metropolis, there is but this one devoted to the improvement of curative means. However interesting and valuable the proceedings of other medical societies may be, it must be admitted, that in investigating the causes and effects of diseases, all lose sight of the great object and end of medicine, the enlargement of our remedial measures. The discussions of other societies, remind us, too often, of the justness of the remark of Celsus, "*morbos autem non eloquentia, sed remediis, curari.*"

When we consider the immense value of the vegetable remedies recently discovered, and long considered inert, such as lemon juice, iodine, the product of the low, the vile, and useless alga or sea weed, we learn an instructive, though humiliating lesson, which compels us to admit, that many other productions of the vegetable kingdom may contribute as largely to the alleviation of human suffering, and to the promotion, of the health and happiness of millions who may succeed us. These reflections should stimulate us to exert our best endeavours in the prosecution of the very important objects of this society, which are of such immense value to mankind.

University of London.

On Friday week last the Students in Medicine at this Institution entertained at dinner the Medical Professors, and the Professor of Law, at the Freemason's Tavern :

MR. EISDELL, a Senior Student, in the Chair.

ON the removal of the cloth the Chairman proposed the healths of "The King," "The Queen, and Royal Family," "His Royal Highness the Duke of Sussex," which were received with cordial applause.

The senior Vice-President, Mr. Nash, in proposing the health of "His Majesty's Ministers," observed, "That on an occasion like the present, he deprecated all allusion to political feeling; but when he saw amongst the illustrious statesmen to whose care and guidance the vessel of the state is now entrusted, the earliest friends and the warmest supporters of the University of London, he felt that there needed no more to arouse the enthusiasm of his hearers, when he proposed to them the health of His Majesty's Ministers." This toast was most enthusiastically received, as was also that of "Lord Brougham and the Council of the University," eloquently introduced by Mr. Wright, the junior Vice-President.

The Chairman rose to propose the healths of the distinguished guests in honour of whom they met there on that evening, "The Medical Professors of the University of London." He called upon his fellow-students—he called upon the medical profession at large—to point out to him a collective body of men so distinguished for all that could do honour to the profession which they adorned—so well calculated to maintain the just reputation of the Institution to which they were attached. He congratulated

his fellow-students that they could count among their Professors the highest names in their respective departments; and expressed an assurance that whilst they had an Elliotson, a Turner, a Quain, a Grant, a Cooper, and a Thomson, no fears need be entertained for the literary supremacy of the University of London.

The speaker was repeatedly interrupted in the course of a long and able speech, by loud and continued cheers; and the health of the Professors was drank amid the warmest demonstrations of the good feeling which exists between all parties.

Dr. Thomson rose on the part of his colleagues and himself, to express the sincere gratification which the present meeting afforded him; and observed, in the course of his speech, that the relation between professor and pupil should be that of senior and junior student, rather than that of teacher and scholar. He concluded by proposing the "Health of the President."

The "Memory of the late Professor Bennett" was proposed by Mr. Shute, and drank in solemn silence; after which Dr. Grant eulogized the character, and deplored, in feeling terms, the premature fate of his talented friend.

Mr. Nash, in proposing the prosperity of the University of London, remarked that "its foundation had wiped away the stain upon this metropolis—the Queen of cities—the Empress of the commercial world—that while her merchants were princes, her harbours the resort of all nations, her streets crowded with a dense and wealthy population—there existed within her walls no emporium for the supply of intellectual necessities." He adverted to the many beneficial results which had already accrued, and must accrue, from its establishment: not only to the medical profession, but to science in general; and expressed a hope that, on each

return of that anniversary, a numerous and united band of her future sons might again re-echo the sounds as they poured out a libation to the honour of their *alma mater*, to the prosperity of the University of London.

Mr. De Morgan, brother of the late Professor of mathematics, in introducing the next toast, "The schools of law and general literature in the University," dwelt on the advantages of general education to the members of the medical profession. He observed that in England, before the establishment of this University, there was no fountain of general science accessible to the great mass of the profession.—"Universities there were; but almost without schools of medicine. Schools of medicine there were; but unconnected with schools of general science. Here both are united—here the kindred sciences are placed side by side, illuminating each the other."

Professor Amos, in returning thanks, said that, being the first lawyer who ever delivered lectures to medical students in London, (the Professor gives part of the course of medical jurisprudence), his friends were somewhat anxious for his safety, and regarded him as another Cook on a voyage of discovery. However, he soon communicated to his friends that the "natives," among whom he steered his venturous bark, were most intelligent, industrious, and, he would say, intellectual beings. "And now," continued the Professor, "after what I have seen this evening, I shall add, in my next report, that they are hospitable, generous, and high minded gentlemen."

Doctor Turner proposed the basis on which the fame of the University must rest: "The prosperity of the students."

The Chairman and Professors retired at an early hour.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

THE principles which you avow in your prospectus as the basis of your conduct in editing the new Journal, will most assuredly, if steadily and unflinchingly adhered to, be of incalculable service to the profession and the public. The *Lancet*, doubtless, has done much good, and though many of its readers have regretted and deprecated its tone of coarse invective, on many occasions, yet their gratitude is due to its spirited Editor, by whose exertions much of the tyranny and oppression of the chartered bodies have been diminished, and an air of freedom and independence infused into all departments of our science. The *Medical Gazette*, being the organ of the oppressors, who yield nothing but to the most irresistible necessity, may suit the palate of interested dependents, but cannot be trusted to for the assertions of the just rights and privileges of the commonalty of medicine and surgery against the "iron hand of tyranny." Let us hope, therefore, to find in you a studious avoidance of personal attacks—a rigid adherence to just, unfettered criticism, support to all students for their claims of equivalent returns for the large sums paid their teachers, whether as lecturers or hospital functionaries, and a zealous and energetic exertion of your talents and influence to throw down the brazen walls of unjust monopolizing corporations; to secure to all practitioners, licensed by any authorized College or University, the privilege of exercising their profession where they please, unmolested by any local corporation, or being subjected to further demands on their pockets. Wishing you success in your present enterprise,

I remain,

Your most obedient servant,

FREEDOM,

GENTLEMEN,

ALLOW me to call, through your Journal, the attention of the profession to a clause extracted in No. 1, from the Report of the Commissioners of Inquiry into the state of the medical schools in Scotland: it is, "It appears to us that it is most inexpedient that the Degree" (of M.D.) "which confers a right to practise, should be granted by any University in which there is not an adequate number of medical professors."

The principle herein propounded; will, I am sure, meet the ready and hearty approval of all educated and sensible men; and it is one, the application of which fairly and impartially administered, would be hailed with universal delight. It would lead to great and important changes—changes known devoutly to be prayed for. Our English Universities would, under such a rule, either cease to confer medical degrees, or rather, suiting their antiquated forms to more reasonable and modern ideas, would establish efficient and well organized systems of medical education, instead of the faulty and imperfectly inadequate ones that now prevail. They would have to keep pace with the general march of improvement manifest in all other schools of the healing art. But if imperfectly formed institutions should, on the above well-founded proposition of the Commissioners, be deprived of present rights, on account of their not possessing just grounds for further exercising them, so ought new institutions, suited to the age, and surrounded with the splendour of every thing calculated to afford a full and liberal education in medicine and surgery, be endowed at once with the authority of giving degrees. Let disfranchisement and enfranchisement be exercised in these, as well as in political matters, and great and lasting will be the gratitude of this and succeeding generations to the enlightened and liberal benefactors of their species, as those undoubtedly

would be considered, who carried such measures into effect. Need I more distinctly name the "London University," "in which there is an adequate number of medical professors" of the highest eminence, and where all the arrangements are of the most enlarged and beneficial plan yet adopted any where, as highly deserving the favour of our gracious Sovereign, and fully worthy of a Royal Charter. The ideas that have occurred to me, and which I have very briefly stated, may, I hope, call forth able correspondents on this interesting subject; on which you, Gentlemen, also, may at some future time, when leisure is afforded from the present engrossing disease, expatiate; should our views be in unison.

I am, with respect,
March 2, 1832. FREEDOM.

The Anatomy Bill.—The *Legal Observer* proposes that the following forms should be introduced into the Anatomy Bill:—

"*Clauses which may form either a separate instrument, or may be introduced in a will relating to other matters.*

Where a person is desirous that his Body should not be dissected.

"*I hereby expressly direct, that that after my death, my body shall not be dissected, or be submitted to any medical or surgical examination whatsoever, but shall be buried in the usual manner [and I request that my executors hereinbefore named will see that this direction is attended to.]*

[*Signature*]

"*In the presence of*"

[*Witness.*]

"*Where a Person is desirous that his Body should be dissected.*

"*Whereas, I am sensible that I have in my life very feebly discharged my duty to my fellow creatures, and am anxious, if possible, to benefit*

them, after my death, which I am informed I may do by submitting my body to dissection: *And whereas*, at all events, my body must soon decay and perish in corruption, *I hereby* expressly direct, that after my death my body shall be dissected, and submitted to such medical or surgical examination as may seem proper to *A. B.* or to any other medical practitioner who may be desirous of making such dissection or examination: and after such dissection or examination shall have taken place, I direct that my body shall be buried, [And I request that my executors hereinbefore named, will see that this direction is attended to]

[*Signature*]

“ ‘ In the presence of ’ ”

[*Witness*]

Amputation of the shoulder joint.—

John Smith, hay binder, residing at Moreton, was about three weeks ago bitten by one of his horses in the forearm, so as to occasion a fracture of both bones. A small black mark soon afterwards appeared on the skin, immediately above the fracture, which increased to such an extent as to cause the entire death of that part of the limb. Dr. Potter of Ongar, Mr. Rowe of Chigwell, Mr. Rix of Matching, surgeons, held a consultation on Friday last, at which it was deemed necessary to amputate the arm, and the operation having been performed above the elbow, the bone was discovered to be so much diseased that they were induced to resort to the more formidable operation of removing the arm from the shoulder joint, which the poor patient endured most heroically, and who, we happy to add, appears in a fair way of recovery.

Atmosphere of London.—M. d'Aracet, member of the French Institute, recently made a scientific tour through this country. Feeling that he coughed

without having a cold, in the foggy weather, he attributed it to the state of the atmosphere; and to examine the air, he exposed a piece of wet litmus paper for half an hour, when it became red from the carburetted hydrogen and carbonic acid gas in the atmosphere. He one day placed a piece of litmus paper in his hat, and walked into the air, when a similar change was produced.

This ingenious individual has visited many of our manufactories, and suggested ameliorations which will be productive of several thousands per annum to the proprietors. His journey proves that the French are as far before us in the application of chemistry to the arts, as they are behind us in machinery.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I AM anxious to direct the attention of the rich and benevolent, through the medium of your Journal, to the scenes of wretchedness, poverty, and disease, now existing among the poor in the Borough. In company with my friend, Dr. Gilkrest, I paid last week a visit to this part of our great metropolis, and never shall I forget the heart-rending scenes which I there witnessed. In one house, in Christchurch parish, we were requested to visit a child represented to have just been attacked with the cholera: Dr. Gilkrest, and myself visited this child; we ascended a dark pair of stairs, and were ushered into a room more resembling the den of a wild beast, than the habitation of a human being. On entering this human den, we saw a tall woman, having the appearance of a living skeleton, seated on a box in the middle of the room. In this poor woman's countenance was described a sensation of the most acute mental suffering. Her half clothed body, her haggard and ghastly features, her palsied limbs, were sufficient to excite in the heart even of the most callous of human beings, feelings which no tongue however eloquent—which no pen, however powerful, could with justice describe. In this woman's lap was her child, half naked, who had just been attacked with the cholera; by the mother's side set another daughter, apparently half starved, partially covered with a dirty blanket. In this room, this wretched family had vegetated for twelve years; there was no fire place,

a fire hearth, the slightest vestige of a bed or bedding. The air of the place was so highly concentrated, in consequence of an accumulation of filth in one corner of the room, that it alone, independent of the influence of contagion, was sufficient to give origin to the most virulent pestilential disease. This family we were told, subsisted on *two shillings a week*, which small sum they got from the parish in which they resided. I could not have conceived for a moment that in a city like this, renowned for its wealthy and benevolent inhabitants, that a scene so revolting to human nature could have existed. In my opinion, the only effectual way of putting a stop to the progress of this pestilence, is to remove the *predisposition of the poor*. Why is this disease, it is frequently asked, confined almost exclusively to the wretched hovels of the destitute Irish?—because they are suffering from the most acute mental and physical depression. Give food to the hungry, clothe the naked, remove the filth from the habitations of the poor, and the cholera will quickly disappear. We heard some months ago, of sermons being preached, and collections being made in every part of the United Kingdom, for the starving poor in Ireland.

Have our clergymen no sympathy for the starving poor in this great city? Is there not one benevolent minister who will set the good example, and devote one half hour in pleading in their behalf? Eloquence might here find a theme on which to exhaust itself. Would that the departed spirit of the benevolent Howard could visit this city—what would be *his* sensations? I sincerely hope that the daily press, instead of devoting their time to the discussion of the comparatively useless question of the existence or non-existence of *Asiatic cholera* in London, will endeavour to rouse the dormant sympathies of the benevolent, by pointing out to them the condition of the starving poor in this city. The scene of wretchedness which I have just described, was not the only one which we had the pain of witnessing. Hundreds of human beings are perishing for want of the common necessities of life. “Blessed is he” says the Psalmist, “that considereth the poor; the Lord will deliver him in time of trouble.”

I am, Sir, your obedient servant,

FORBES WINSLOW.

London, March 5th, 1832.

To the Editors of the *London Medical and Surgical Journal*.

GENTLEMEN,

I OBSERVE in your last number, that in one of the dissections performed by my friend Mr. Hooper, on a patient who had died from the

prevailing epidemic, “raisin stones were found in the appendix vermiformis.” As severe disease arises from such an event, more frequently than I think many are aware, I will briefly relate a case which came under my care on Monday last. I was sent for, about noon, to see a boy named Gillhorne, who was twelve years of age. I was informed that, on the Tuesday previous, he had retired to bed after a long walk, apparently well, but an hour or so after, he complained of pain in the abdomen. On the following morning, his bowels being torpid, some rhubarb and magnesia were given, and fomentations applied; the bowels acted in the evening, but the pain was not diminished, and he had vomiting and liquid motions; with much, and continued pain during the week. On Sunday some mist cretæ, &c. was obtained from a chemist, but no relief was afforded; and when I saw him on Monday, at eleven a. m. I was informed his bowels had been twice in the night, and three times in the morning, and the motions were yellowish and liquid; his tongue was moist and white; pulse 128 and feeble; he complained of occasional rigors, and much abdominal tenderness. I advised a dozen leeches to the abdomen, to be followed by fomentations, and a little antimony, calomel, and opium, taken every two hours. I saw him about six p. m. and found, although he expressed himself a little relieved from pain, and the vomiting and purging had ceased, that his pulse was above 140, and that he was evidently sinking; and upon my calling about eleven he had expired. I examined the body on Wednesday, and never saw a larger quantity of coagulable lymph deposited, than existed throughout the whole extent of the peritoneal covering; when stripped off, it was more like the feel of a kid glove, when wetted; there was about a pint of puriform fluid in the cavity of the abdomen; and upon examining the appendix vermiformis, I found it dark coloured, and above a third of its length occupied by an ulcer, in the centre of which I found a very small body, not, perhaps, larger than a full sized mustard seed, but appearing to be a calculus; and from the examination, I am satisfied the boy's death may be attributed to inflammation, produced by this small body in the appendix vermiformis.

A very interesting case, in which the like symptoms had occurred, and were neglected, (a small bean being the cause) came under my care some years ago, and another more interesting (from the fact that every possible means to subdue inflammation, were early and judiciously applied by my late partner Mr. Clark) occurred in 1829, where a calculus, about the size of a small bean, was found. In this latter case, the pain was principally referred to the lower part of the abdomen on the left side,

I think the subject interesting, but will not occupy your pages more;—the fact is known to many that, extraneous substances lodged in this singular part, are, amongst young people in particular, by no means an unfrequent cause of death.

I am,

Respectfully your's,
W. T. ILIFF.

Newington,
March 2nd, 1832.

[We have seen the foreign body alluded to, and think with Mr. Iliff, it is probably a raisin stone.—EDS.]

Westminster Medical Society.

Saturday, March 10.

GEO. JEWEL, Esq. in the Chair.

THE minutes of the last meeting having been read and confirmed, Messrs. Gosnor and Taunton were elected members of the society.

Dr. Stewart was then about to read an extract from Dr. Latham's account of the disease, which appeared in the Penitentiary in 1824, from the chapter on bowel complaints, but deferred it until after the discussion had been opened by Mr. Hunt, at the suggestion of the President.

Dr. Gregory then begged to inquire of those gentlemen who had brought forward the cases at the last meeting, whether the disease in Mary-le-bone workhouse, which was said to resemble small-pox, had proved to be that disease?

Mr. Walker then objected to the incorrectness of the minutes, in regard to the case he had narrated, it being stated to present all the symptoms of cholera; a gross mistake had gone abroad, which had proved very prejudicial to him. He appealed to the gentlemen present, whether he had stated it to be a case of cholera; he had rather left it to the Society to designate it; it had been said that Mr. Wright had died after a few hours, while he had distinctly stated, that he was taken ill on the 16th of

July, and died on the 21st. He hoped, that if the gentleman were present, who had made the report, he would correct it.

Dr. Sigmond rose, to answer Dr. Gregory's question, as he had been one of those who mentioned the cases; he believed that it was Dr. Daun who first observed the pustules, but he could give no further information, as when he went the next day to the workhouse, he was informed that there was an order for his exclusion; (*Cries of shame; shame, most extraordinary.*) He could not, therefore, state the result of the cases.

Mr. Chinnock thought that the cases could not be called small-pox, as they were constantly reported as cholera. (*Laughter.*)

Mr. Walker then supported Dr. Negri's views, in regard to the use of quinine; he related a case, which had been under treatment for fifty hours, when the pulse returned, and there was a little bile in the stools. Dr. Daun was sent to see her; he did not inquire into the previous history, either from Mr. Walker or the friends, for he did not even stay a minute; but no sooner did he see the bile in the stools, than he turned on his heel, and said it was not cholera. Mr. W. was not desirous of manufacturing cases, or he might have made dozens.

The President then called on Mr. Hunt to commence his remarks on diarrhoea occurring epidemically.

Mr. Hunt stated that the observations he had to make were not put together at that instant, or to serve any particular views; he believed that epidemic diarrhoea frequently depended on causes, which have been acting on the constitution for some time; he believed that there was at first excitement of the liver, then torpor. When diarrhoea was epidemic, he had observed, that was a peculiar order followed, more especially in the fevers; the vernal was generally inflammatory, gastroen-

teritis, and the autumnal was typhoid. There was a diarrhoea at the present period, very extensively raging, which was very similar, in his opinion, to former epidemics, but with one distinction; when prostration occurred in the diarrhoea, in the months of August and September, the patients quickly rallied.

Dr. Stewart then took the opportunity of reading the extract from Dr. Latham's work, and which he observed was drawn up at a time, when a visit from the Indian cholera was as little expected as one from the Emperor of China. Some of the cases related appeared to resemble the Indian cholera in several of the symptoms, but not entirely. Dr. S. thought the circumstances of discomfort would aggravate the mortality of the disease considerably, and that the influence of prophylactic measures was very great in arresting its progress, and hoped that the exertions of individuals would be directed to that point.

Mr. Chinnock thought, that the point established by Mr. Hunt was of great importance, as he had shewn that there was a diarrhoea in London, unconnected with cholera, and he appealed to the members present, whether they had not seen extraordinary cases of diarrhoea in their private practice. We are told, that cholera is always preceded by diarrhoea and vomiting; he had seen a great many such cases, which had gone on to collapse of a violent nature, but certainly unattended with a cold tongue. Medical men were bound under severe penalties, (*cries of shame, shame,*) to report all their cases of cholera; now Mr. C. although he had attended all the meetings of the Society, could not tell how he was to distinguish the disease; he had read every work on cholera, (*oh, oh,*) he believed he ought to qualify,—*as many as he had time to read,* (*laughter,*) and he knew not yet the distinguishing symptoms of

cholera. He had not seen anything very extraordinary in the cases called cholera, which he had seen, and he was very desirous of knowing the particular symptoms, which characterise cholera. He then detailed a case, supposed to be cholera, in which every one fled from the unfortunate patient, and a nurse could not be obtained, even from the Parochial Board of Health, (*shame, shame,*) until the inspector had seen the case, and declared it not to be cholera.

Mr. Costello proposed that, as a companion to the present discussion, the society should enter into a detail of the symptoms of English cholera.

A stranger related a case from St. Giles's parish, in which spasms occurred two hours after death; blueness of the skin was very evident: the patient was a young man, about 26 years of age, and a great gin drinker.

Dr. J. Johnson begged to read an account of two cases of epidemic cholera, which had occurred in the North of England; the first, a debilitated female, was seized with vomiting, purging, spasms, extreme cold, sunken countenance, imperceptible pulse, and colourless stools: in seventeen hours she was dead; the body was of a bluish black colour, and mottled appearance; one leg was flexed by spasm. An old woman, who had attended the funeral of this last, was seized a week afterwards; she died on the third day, re-action having taken place. He visited a cholera hospital, where there were patients which were dying, and others dead; he had read these cases to ten gentlemen, among them the medical men of the hospital, and they declared that human language could not describe the cases occurring at present in more appropriate terms. These cases were taken from the report made by Mr. Thackrah of the epidemic cholera at Leeds, in 1825. (*Laughter.*) He had in this case a little mental reservation; indeed the gentlemen said he had employed

a ruse; but he was perfectly justified, Leeds was in the North, and this was an attack of epidemic cholera; he thought this was a strong proof that it was not a *nova pestis*. With respect to the diarrhoea, he was not one of those who abuse the Central Board of Health, because the current of public opinion runs against it, and because it had not the power of the former aristocratic Board; that Board had issued three words, which were of more use than any which had emanated from the other—"diarrhoea is the beginning of cholera;" and if they had added three other words, he should have still further agreed with them—cholera is the end of diarrhoea. Diarrhoea has been prevailing for some time past, and he believed that cholera arose from neglect or ill treatment of this diarrhoea. He then narrated a case occurring in a gentleman, consequent on neglected diarrhoea, which soon proved fatal; and he believed, that had he been treated by a medical man during the period of the diarrhoea, he would have been saved. In nineteen cases out of twenty, cholera begins as diarrhoea, and ends as such, without ever going on to cholera.

Mr. Chinnock stated, in a case which had occurred at Chelsea, he made inquiries, and found that no one in the family had tasted animal food for four months.

Mr. Stodart inquired of Dr. Johnson what symptoms were wanting to make the cases Indian cholera?

Dr. Johnson said, that the leading symptoms of cholera in India, Russia, and England, were the same: the ague of Walcheren, Batavia, and Lincolnshire, were the same; but would any one contend that the ague of Walcheren or Batavia travelled to Lincolnshire; what he objected to, was the travelling of the disease. He asked if any gentleman present could lay his hand on his heart and say that the disease in London had travelled from one individual to another? If put to it, however, he would say that

there was a difference. From the Madras reports, and they were the best of the three Presidencies, it appears that there was seldom diarrhoea preceding, or consecutive fever; indeed the word fever is never mentioned. There were indeed sequelæ in the brain, liver, stomach, &c. but no fever; but here, we have generally diarrhoea, which is a part, and not the precursor, of the disease; while, if the patients recover from the cold or blue stage, as a general rule, confirmed by the exceptions, there is consecutive fever.

Mr. Griffin inquired if Dr. Johnson had visited the Cholera Hospital at St. Mary Newington?

Dr. Johnson:—No, I have not.

Mr. Griffin then said that he had visited that hospital, but as his presence had been objected to, he had had time to make only one or two observations. He had observed that there was great difference of opinion between the nurse and the surgeon. (*A laugh.*) In one case that was there, he inquired of the nurse when the bowels had been open? "At four in the morning."—"What colour were they?" "Dark and brown." He found too that he made water; and the nurse knew that he had done so, because "it trickled down by the side." On inquiring of the surgeon, he was told that the stools were of the rice water description.

Dr. Gilkrest rose to order. He thought that the opinion of the surgeon should be taken, and that it was improper to detail that of the nurse. The Society, however, decided otherwise.

Mr. Griffin continued, and said that the man had been bled that day; the surgeon told him that there was no serum; but when he saw the blood, there were three or four ounces floating on it. He was called by the surgeon into another room, told that no one had a right there without his permission, and was walked out into the street.

Mr. King thought that both the nurse and surgeon might be correct, as the stools might have been rice-coloured when he entered, and have changed since; he also informed the society that when blood is first drawn, there is no serum; and probably the surgeon alluded to it in that state.

Dr. Gilkrest alluded to the case in which spasms are represented as occurring after death; and thought that it was after *apparent* death only. He considered that there was great danger in acting on the supposition that death had taken place, while motion was still going on.

Mr. Greenwood said that the disease which had been imported into Sunderland, had been universally acknowledged to be identical with the Indian disease, and contagious (*No, no, no.*) Well, then, generally. (*No, no*); and he believed such would be the case with the disease in London. He believed that the diarrhœa was part and parcel of cholera; but contended that diarrhœa and consecutive fever were described fully by Orton and Kennedy. (At this moment a desultory conversation took place between Dr. Johnson and Mr. Greenwood, which ended by the latter reading a quotation.) Mr. G. then alluded to the convict-ship, which left port lately, and on board which several cases occurred, as proof positive of contagion, as there could be no terrestrial emanations; and declared that the disease could be traced by contagion from Jessore to this city.

Mr. King considered that individuals under the same circumstances, breathing the same air, taking the same food, might be affected with the same disease, without recurring to contagion. He thought that cholera was the same every where, but modified by climate; and was desirous of learning whether the disease was sufficiently new, to authorize Government in the precautions taken. He had seen a case, said to be decided

proof of contagion—a woman seized with cholera, after washing the linen of a patient who had died of that disease; but he had found, on inquiry, that she had suffered from diarrhœa previous to the said washing.

A gentleman inquired the mortality at Leeds.

Dr. Johnson said that the range of the disease was greater than the mortality; still the two cases he had recorded were exactly similar to the disease we have at present.

Mr. Chiunock said that he had inquired the characteristic symptoms of the cholera, and he was told *shrivelled fingers*, and the *rice water evacuations*. The fact is, that he has seen both these symptoms occur previous to the present epidemic. He should be inclined to treat symptoms as they rose, for as yet he knew nothing of the proper treatment of the disease: specifics they had in plenty.

Dr. Stewart hoped that Mr. Hunt would open the next evening's discussion with remarks on the premonitory symptoms of cholera. He had seen a body which was very warm twelve hours after death; the thermometer marked 87° when placed in the abdomen. There had been another case seized, which had been taken to the cholera ship while under salivation.

Dr. Webster begged to refer the society to the description of cholera given by Dr. Buchan in his *Domestic Medicine*; and he was astonished that no reference had, as yet, been made to that work. The symptoms there recorded were the same as those given for the present epidemic, with the exception of the *rice-water evacuations*. The symptoms were, imperceptible pulse, cold skin, spasms, obstruction of urine, ghastly countenance.

Dr. Watson said that in treating diarrhœa, astringents were best; the *hydragyrum c cretâ* and *rhubarb*, he had found most efficacious.

A gentleman from Ware stated that he came there to gather their opinions, and expressed his delight that the members were almost unanimous in the belief that the disease was not a new one, and added, that he thought it was a new disease at Jessore, and believed the present epidemic to be identical with the Indian disorder. He narrated two cases which had occurred at Ware, as proof of contagion; a bargeman and a boy, who had each passed two or more nights in Limehouse, were seized with cholera on their return to Ware, and died. No other cases had occurred.

Mr. Walker considered that these cases were far from proving the contagion of cholera. They had both been in the neighbourhood where the malaria was, and were so far lucky that the disease did not attack them till their return.

Mr. Costello gave the case of the sailor at Bristol, as farther proof against contagion. The man was visited by all his friends, and they were very numerous, yet the disease had not spread.

An Indian practitioner said that there had never existed any idea with regard to the infectious or contagious nature of cholera in India.

Mr. Greenwood said that it was so at first, but that after some time proofs thickened so on them, that Kennedy says they were forced to admit its contagious nature. He objected to the cases brought forward by Dr. Johnson, as the appearances after death were not detailed, and a case could not be decided to be cholera, unless the symptoms and *post-mortem* appearances tallied.

Dr. Johnson cited a case from Mr. Thackrah's work, in which the intestines were full of albuminous fluid. He stated that the appearances after death were negative, and nothing could be learned from them.

The Society adjourned at about eleven o'clock.

To the Editors of the London Medical and Surgical Journal.

HORSEWELL v. BLICKE.

Walthamstow, March 5th, 1832.

TO C. A. KEY, Esq. and F. TYRRELL, Esq.

GENTLEMEN,

I DEEM no apology necessary for thus publicly addressing you, as the subject is already one of notoriety by the publication of the trial *Horsewell v. Blicke*. I have to regret the delay, which has, I assure you, been occasioned solely by the impossibility of my procuring an authentic copy of the minutes of your evidence on the trial, which I deemed necessary to prevent misunderstanding on the strictures I am about to make on that evidence, and your subsequent conduct; and which I trust, for your own sakes, you will feel yourselves called upon to answer.

I am informed by two of our mutual friends, whose names I am at liberty to use, if necessary, that you, Mr. Key, have mentioned with regret, that you were not in possession of the nature of Dr. Titley's evidence. Am I to understand, Sir, by this, your evidence was from an *ex-parte* statement, so arranged in your mind, that you could not afterwards divest yourself of the impression; or that you thoughtlessly or ill advisedly advanced evidence on speculation and theory, which would have blasted the reputation of a professional brother.

"Utrum horum mavis accipe."

I envy not your feelings, though you are said, by the same person, to rejoice at my success; and that you, Mr. Tyrrell, have gone so far as to say I have been very ill used; and had my counsel put proper questions to you, you could have shewn clearly I could not be inculpated. I shall examine presently how far you are borne out in this assertion. I am

sorry I cannot give you credit for it. I shall now, however, submit your individual conduct to be judged of by the world and your own consciences ; and proceed to a critical examination of the remarkable parts of your evidence, commencing with Mr. Key's.

In answer to the 3rd question, to describe the condition of the leg, you, Mr. Key, take it for granted both bones were broken ; for you say, " the eversion was occasioned by the fibula having united shorter than the tibia, the latter being twisted round."

In answer to the 4th question, you reply, " he bears on the small part of the foot ;" a curious result indeed, and no doubt a philosophical one, that the shortening of one of two previously equal props, should make the short one take more weight ; it is remarkable, however, Mr. Tyrrell, in his answer to the 8th question, flatly contradicts this.

Question 5th. " Is the eversion of the foot permanent?"

Answer. " I think it will be so."

Would it not be better to doubt where there was a possibility of doubting?

In your answer to question 10th, you reply you have not *heard* whether it was an oblique fracture or a transverse one. Here, then, it appears you could not rely on your own inspection ; a clear proof the opinion you gave of the state of the condition of the limb, in reply to the 4th question, was purely speculative, or founded on hearsay. Would it not have been wiser to have gone on (the better to support your theory) with your original speculation, and stated it an oblique fracture, in lieu of allowing the learned sergeant to call the tyro, Mr. Mackenzie, to commit himself, by stating it was a transverse? For proof of this, I refer you to a fresh inspection, or to Mr. Callaway, a surgeon of no mean eminence, who stated to me the night before the trial, that he had just examined the leg,

and could distinctly feel the edge of an oblique fracture.

To the 14th question, " supposing the limb had been properly secured, could the large bone have become twisted, &c."—you reply, " it is quite impossible ;" in other words, " when the surgeon left, nothing could undo what he had done till his next visit."

To the 15th question, " was the application of hot water, when Mr. Mackenzie saw it, a proper remedy?" you reply, " I never heard of hot fomentations of water being applied to any fracture of the kind." Am I to understand by this, you have really never read a single work on inflammation ; for none that I have ever read has been without its comparison of the relative value of hot and cold applications? I would recommend you to try warm fomentations on your next patient, and see which he prefers, and then I am sure you will admit we have ample testimony, which you ought to use in future. Perhaps you will tell me there was only swelling of the limb, and not inflammation ; and therefore I refer you to your answer to question 19th, as to the occasion of the unusual extent of callus, viz. " I should think it was produced more by the extent of inflammation that attended the accident."

In reply to the 24th question, " you think him suffering an extent of pain;" and to the 26th, " the pain will wear off as the bone recovers its strength," I ask, did you try its strength? Mr. Callaway made him, at the time before alluded to, to hop off the sofa on this weak bone, and told him, as Mr. Earle had previously done, but without concert, he had no pain.

In reply to questions 27 and 28, relative to the bones yielding by persons walking about before the callus is hard, you say, " this case is not occasioned by that." On what do you ground this opinion? To question 30, you reply, the average period at which a man may walk moderately,

is between two or three months. Now it was proved that this man was seen before the end of the month in the tap-room, and walking in the street at his master's house (sworn it is true to be under a quarter of a mile from his residence); but is it not a good specimen of what he did before your period had elapsed? and would it not have been better to doubt, where your positive opinion, if credited, might in the minds of the jury have affected the reputation of a surgeon; your senior in years, and one whose practical experience must have been infinitely greater than your own, and when in truth, your assertion is proved by Dr. Titley, on his oath, to have been an erroneous one.

I now come to your cross-examination. Your evidence in chief, most people will, perhaps, think ought to have sufficed me, but, unfortunately for you, I was early accustomed to hard reading, especially the ancient authors, and there I learned, that to acquire a true notion of men and manners, and boldly to announce them to the world, was an indispensable obligation on every individual; I therefore must proceed, having stated in reply to the 31st question, you had examined the leg; the 32nd question asks, if you had distinctly ascertained fractures of both bones, and you reply, the part where the fibula *appears* to be broken, is so covered with muscle, you could not so well ascertain it. In answer to the 34th question, as to whether it was broken at all? you "have no doubt of it whatever." The 35th question asks, if you had any means of ascertaining what precise way the fibula was broken? and you reply, "not with precision." The 36th question asks, if the fracture of the fibula was opposite, or in a line with the fracture in the tibia? and you reply, "not quite in a line."

Dum vitant stulti vitia, in contraria current.

The 38th question asks, if a man

fractures the tibia by any accident, and falls, may not he, on getting up from the ground, fracture the fibula? and you reply, "it is very unlikely, because the fibula, being the weaker bone of the two, it would give way first." Now, Sir, you are a senior surgeon of Guy's Hospital, and I cannot believe but that, on reflection, you will admit your practical experience has taught you otherwise, and that you were bewildered by the recollection of what you had to prove. Doubtless you know, Sir, that the tibia wholly supports the body, and necessarily bears all the shocks in its own axis, and most of those in a transverse direction; a little reflection and common sense would then tell you that fact, which is laid down in most authors—viz. "that when both bones are broken, the fibula is always broken subsequently to the tibia," and of course at the weakest point, the upper part of the bone. Two exceptions only occur, and these are; first, when, both bones are broken by a blow, applied so as to act transversely on both bones at the same moment, when the fractures are always in a line; and secondly, where the force, operating on the fibula, is the outer side of the foot, neither of which cases can this be, because you state, the man broke his leg by kicking his toe against the gate or stile he was leaping over. The tibia, you say, was broken four inches above the ankle and the fibula not quite in a line; now if broken below the line of the fractured tibia, could you not have ascertained with precision? but before you answer this, let me remind you, if you say above, it would just be about the thickest part of the bone, and least likely to break: let me refer you to Lawrence, Cooper, Dupuytren, &c. &c. I ask you then, Sir, again, what bewildered you so, with every day facts before your eyes?

In answer to the 62nd question, as to Dr. Blicke's qualifications, &c.

you reply, you do not know Dr. Blicke (the question evidently, not meaning personally) it is possible, certainly, if you are so ill read, as you would make it appear, that you might never have heard of me. Here, however, I confess, my vanity is a little hurt—but I will only refer to two of the remaining 29 questions; and first, the 74th question, “may not any eversion or shortening, that has taken place, have arisen from a dislocation of the tibia, subsequent to the formation of the callus; in short, may not those effects you describe have resulted from that and a subsequent fracture of the fibula at the period of dislocation?”

“I think not, because the callus of both bones is consolidated together, and I do not see how the fibula could have joined shorter; it appears to me to have been a thing, that originally took place.

4th question. “Suppose it had been found, upon taking off the splints, six weeks after the accident, that the callus was evidently soft and imperfect, may not any irregular position of the limb have occurred subsequent to that period?”

“The difficulty is, the shortening of the fibula; I cannot think how the bones could have joined as they have done.”

Now, Sir, these two answers exhibit the principal cause, which led you into error, and which, to rectify and save yourself, you floundered about, and got deeper and deeper into the mire. You were told by the lawyer, the plaintiff, and the medico-lawyer (as Mr. Earl termed the general practitioner on the trial,) the man who hawked the plaintiff about from surgeon to surgeon, selecting those that answered his purpose, and rejecting those who did not), that the fibula was broken, and very possibly also, by the tyro, Mr. Mackenzie, and you believed it. Remove this fact from your mind, and all is plain and easy, as it would appear; but, Sir,

was this the duty of a medical witness—was this to be expected from a senior surgeon of Guy's, “to give evidence on any other facts than those exhibited by the limb itself?” And will you now have the temerity to assert the fibula was broken, in face of the positive fact sworn to the contrary by Mr. Dalglish, a surgeon of ten years practice, and who saw the limb and examined it the day of the accident?—In face of the recorded fact exhibited by the entry in my day-book at the time, and when no sinister motive could have occasioned such an entry?—and in face, I may now say, of your own evidence; for be it remembered, Dr. Titley has sworn to the leg having been straight on the 18th of July, which preclude the fibula having been broken. If your evidence be correct, I feel certain you will not—nay, more, I feel convinced the regret you have expressed is sincere, and I am only sorry that a sense of public justice, a sense of what I owe to the profession at large, compels me thus to address you; for when I am informed hardly a term passes over without these actions being brought by some petty-fogging lawyers against my professional brethren, and that almost all compromise by paying a sum of money, however innocent they may know themselves to be—remembering, a surgeon's skill is like a woman's honour, it must not be breathed upon; independent of the known prejudice of juries, and the ruinous expense it puts defendants to, even where they are sure to obtain a verdict, I cannot but hold up you and your conduct as a beacon to assist in avoiding the dangers to which, from the very nature of our profession, we are all exposed. Every one knows the philanthropy induced by the practice of our profession, and how blind we are in not looking more to the support of each other's character; but it is the infirmity of human nature, arising from

that all-powerful cause, the never-ceasing necessity of establishing and watching over our own reputation and character, to enable us to supply even the wants of nature, and which too often make us blind to the effect produced on the character of others, in the maintenance of our own. I have said blind, because I really believe, nine times out of ten, it is most innocently done.

I have now, Mr. Tyrrell, to examine how far you are borne out in your assertion, "had my counsel put proper questions to you, you must have exculpated me?"

In reply to the 25th question, "whether both bones were broken?" you answer, "decidedly"—and no doubt came to this conclusion for the same reasons as Mr. Key.

In reply to the 26th question, "whether the fibula was broken at the time of the first accident, or at a subsequent period, by over-exertion?" you reply, "you can only say there has been a fracture of the tibia and fibula." And to the 27th question you reply, "it is your *opinion* they were broken together." To the 28th question, "it was impossible for the tibia to have united as it has done, if the fibula had remained sound; it might have yielded, but not to the extent."

Question 40th.—"Supposing the fibula to have been fractured, might not that have been at a subsequent period after the first injury?"—you reply, "it might have been." And to the 41st question, a consecutive one, "and have produced the effects you see in the leg now?"—you reply, "no, I do not allow that." Now, Sir, according to this evidence, and if it be still your opinion, how can any questions put to you, prove my innocence of the charge alleged against me? The fibula having been proved not to have been broken in the first instance, your's and Mr. Key's evidence is chaff before the wind. The truth is, you fell into the

same error as Mr. Key: your minds were made up on this point; otherwise, had either of you paid attention to the evidence adduced by the plaintiff, of my attendance, it would, I should have thought, put you on your guard; for after Sergeant Wilde had asserted I had only seen the plaintiff four times, the first witness he called (Watson), swore to his having seen me five times, and proved, by inference, I was there more than double, for he also swore he was more from home than at home, and had heard of my being there when he was from home; whilst other witnesses proved I must have been there at least eleven times. Or, again, if you had attended to the discrepancy of the evidence about the bowels not having acted for fourteen days, coupled as it was with the fact, that a tea-spoonful of castor oil given by one of them, went through him, you would have been more on your guard, and not have felt it necessary to make a sort of an apology for your evidence, which you now find is wholly untenable.

I now, gentlemen, take my leave of you for the present; but as it is most probable, after the evidence you have in this case given, you will, of all others, be selected by counsel for plaintiffs in these actions, it is right you should be informed the dictum of hospital surgeons is at an end, and must be so for at least thirty years more, if not for ever. The superior advantages military and naval surgeons have had during the late protracted war, on all practical points of surgery, have induced a habit of independence of thought, which will never brook the dictum of any man, or set of men. Previous to this there was a passive obedience to hospital surgeons, and necessarily so, surgical practice being wholly engrossed by them.

One other point in our profession, perhaps of even more importance, however, still remains to be overcome, and as even you hospital sur-

geons have on many occasions lately fallen victims to it, perhaps you may be roused to avert it when exposed to you—I mean, the prejudice of the world on certain points of practice; and this is the more extraordinary, as in every trade or art but physic, where passive obedience is necessarily more imperative, from the deeper research requisite in its acquirement, the maxim of “*Cuilibet in arte sua credendum est,*” is ever on the lips.

Look to the prejudice against myself in the minds of the jury; the perfect horror with which they heard the man’s bowels were not open for fourteen days, though told, at the same time, I knowingly permitted it. It is for master minds only to bereave themselves of such strong impressions; and therefore the evidence I subsequently produced to prove the falsity of it not being direct, was insufficient with the whole of the jury, though to a man of education it was far stronger than any direct evidence could possibly be, more particularly so as you yourselves swore it could not have affected the limb, but as far as it went, abstractedly considered, was beneficial.

I am, gentlemen,

Your obedient servant,

W. F. Blicke.

To Messrs. Key and Tyrrell.

[Dr. Blicke is eminently entitled to the thanks of the profession for his manly spirit in defending his character, in the action referred to in the above letter. We know that he was requested by some of the most eminent surgeons in London to compromise the affair, as experience had taught them how ready juries are to punish surgeons, whether right or wrong. Even his counsel assured him that such actions were hushed up every day, as surgeons were so much afraid of having their reputation injured by coming into court. But Dr. Blicke was inflexible; he was

conscious of having done his duty; and he has now the great satisfaction of an honest triumph. The only other observation which this case elicits, is with respect to the brother surgeon, who is accused of having paraded the streets of London, in company with the plaintiff, in search of some distinguished member of the faculty who might support his case. We shall not venture a remark upon such conduct, we leave him to whom it refers to his own reflections, and merely ask him, would he relish similar treatment?—Eds.]

Reasons why the Medical Staff in India did not consider Spasmodic Cholera contagious. By S. HOOD, M.D. Brighton.

THE opprobrious epithets and criminal accusations which have been so liberally heaped on the Indian Medical Staff in the cholera controversy, merit some reply; and as the profession have now an opportunity of forming their own opinion, and the nation reaping the consequences of the popular cry of contagion, in want of employment, stoppage of trade, and a falling revenue, perhaps a few reasons for thinking the cholera not contagious in the East, may now be heard with patience.

Spasmodic cholera is not a new disease; it is mentioned in the vedas, and called in the varied dialects of Hindostan, Woba, Sheni, Viduma, Visuchi, and Mordechim, which last word seems to have been misnamed *Mort de Chien* by the French soldiers, as cholera morbus became personified by ours into Corporal Forbes—and it must be confessed they have surpassed the doctors in their nomenclature.

At an early period of our Indian wars, when the Madras European force were only about one thousand

strong, fifty of them were suddenly carried off by this epidemic. When the spasmodic cholera appeared in November, 1818, at Madras, Mooyakeddeen, physician to the late Nabob of Arcot, informed me that, so far back as 1790, being as long as he could recollect, he had seen the same disease every year during the winter monsoon, and that he saw no difference in it that year from any other, except in the increased number of cases. In other words, this disease is endemial every winter among the natives of the Coromandel coast, as the biliary cholera is in England in July and August. In selecting cases of cholera from the garrison, I never saw the soldiers nearest to the cholera patients attacked by it; and in the hospital the same inability of this disease to propagate itself from man to man, was equally manifest. Mr. Bell correctly observes, that the epidemic approached Madras by land; through the communication with Calcutta, and all the coast where the disease prevailed, continued open by sea during the whole of 1817 and 1818. It would, therefore, have been a perverseness of judgment, if the medical officers of Madras and Fort St. George had considered an epidemic, which could not be imported by ships; contagious on land.

Every Indian practitioner knows also that the spasmodic cholera establishes for itself a sort of capricious morbid boundary line, beyond which, for a time, no communication, however frequent, can make it extend. The Indian reports, and Mr. Bell's work, prove this fact beyond a doubt; and if proof were wanting, the following instances may be added to the mass of information already published. Two Sepoy regiments, encamped at Agra, were separated only by a road; one corps was violently assailed by the epidemic, while the other escaped entirely, though the intercourse between them was constant and unrestricted. If the healthy corps had in

this instance cut off all communication with the other, when should we have heard the last of the advantages derived from a sanitary cordon? A light infantry battalion, returning from the Deccan war to Bombay, was severely attacked by the epidemic at its bivouac: a havildar stated to the commandant, that there was no cholera a few hundred yards further on beyond the nullah; the regiment, carrying the sick along with it, marched beyond the morbid boundary, and the plague was staid; not a new case occurred at that time in the corps. A cavalry officer, proceeding up the Ganges to join his regiment in the Upper Provinces, came to a bend in the river, which formed a small peninsula, and his boatmen advised him to shoot across the isthmus, while they rowed round to take him up on the other side. On his way across he passed a village literally bisected by the epidemic, which was ravaging one part of it, while the other was quite healthy. This morbid boundary seems also to extend to the ocean. In 1823, while Commodore Grant's squadron of three ships lay off Madras, the crews of two vessels were attacked by the epidemic; and though the men of the third vessel held free intercourse with their sick companions, they escaped scathless. The two unhealthy ships put to sea, got rid of the disease, and on their return, they found their companion where they left her, still healthy. It is a well-known fact, that the Marquis of Hastings and Sir Thomas Monro, men not likely to act long on false principles, often ordered troops to be marched beyond the limits of the disease, a custom which I believe is continued to this day.

The peculiar influence which produces spasmodic cholera, is connected with the atmosphere as well as the earth; an experienced Indian practitioner can often foretell its attack from the state of the weather. It is well known that thirty men, on the

weather side of the Company's ship Berwickshire, suffered from the epidemic, while few or none of the crew, on the lee side, were affected. In October, 1818, the East India Company's ship lay at anchor, in Languo Roads, with a healthy crew, one hundred strong, and the wind on shore. One night the wind changed to a land breeze, and in the space of an hour and half afterwards, seven of the sailors, who slept on deck, were taken ill of cholera. Mr. Horslay, with that good sense which characterizes him, ordered the whole crew to go below, and the ports to be closed. Thus were all the ship's company exposed, in a confined air, to the animal effluvia of seven diseased persons, yet not one new case occurred, after the crew were removed from the deck. Two inferences may be drawn from the above facts; first, that the cause of cholera is sometimes connected with the atmosphere, and that that cause cannot be electricity, otherwise the deck of the ship could be no shelter: secondly, that the exhalations from cholera patients, cannot convey the disease to others. It is also a well-known fact, that all the East Indian cotton, which has entered our markets these last fifteen years, is more or less impregnated with all the egesta of cholera patients, the dust of which has been, during that period, respired by the cotton spinners with absolute impunity. It was from the belief, that cholera cannot be propagated from person to person on board ship, that an Indian practitioner, when the quarantine was enforced last year, said, that if His Majesty's Ministers gave one year's revenue of the empire, as a premium to import the cholera in a Baltic vessel, they would not procure one case before the month of November.

The contagionists admit, that infectious disorders require considerable time to pass from one individual to another, but in the East this epi-

demic does not follow this law of contagion; it falls upon a community like a shower of grape-shot. It was decided in the King of Siam's Council, that it is caused by a monster, which might be scared from his coast, by making a horrific noise: he marched out against it, at the head of 50,000 subjects, but he lost 5000 in one day, and returned vanquished from the campaign.

A Persian gentleman observed to one of my friends, "we were apprised that the cholera was in Shiraz, by finding one morning, when we awoke, that it had carried off two thousand inhabitants the night before." Perhaps there might be a little Orientalism in this statement, but smaller numbers will better illustrate that there is not sufficient time for it to pass from man to man by contagion. Even supposing that the first man taken ill on board the Warren Hastings infected the other six sailors, how came the whole seven to lose the power of infecting the rest of the crew when carried below? The right wing of a King's regiment, on its route to Cawnore, encamped one night on the banks of a river; and the first thing done next morning was to consign two officers and eight privates to the grave. The first person taken ill was an officer, who lay down in his tent to die, therefore he could not have infected the soldiers. "In 1827, we marched," says Major Robinson, "from Trichimopoly for Bellooy, and though we passed through a considerable portion of country where the disease prevailed, we had not a case during the march; but of a small detachment which followed us a month or six weeks afterwards, the officer and nearly half his men died near Baugapilly." Indeed, it is so common for a regiment or a ship to lose a number of men the first day this disease begins, that it is unnecessary to dwell on a fact so notorious.

But not only is sufficient time to

propagate the spasmodic cholera wanting, but the rapidity of recovery from it equally militates against the idea of its being contagious. It is no uncommon thing to see a patient, on the very verge of existence one hour, and nearly well the next: or, to use the phrase often quoted, "the dead man rose and walked away." Can a patient, labouring under any of the contagious diseases to which the epidemic has been compared, be made to rise and walk away in this manner? All the infectious disorders with which I am acquainted, require, under the most judicious treatment, some considerable time before their influence can be expelled from the human body, and a healthy action re-established in the organs affected; yet the spasmodic cholera, which assails every nerve, artery, viscus, muscle, and membrane of the body, may be eradicated in an hour.

From the above facts, and numberless others of a similar nature, it is quite evident that neither the effluvia nor egesta of choleric patients communicate the disease; that it cannot be propagated in ships, like other contagions, otherwise the East Indians must have imported it fourteen years ago; and that the cause of it is sometimes in the air, oftener in the earth, on the surface of which it chalks out for itself temporary morbid boundary lines, which no human power can vary or controul. There are some men's minds so constituted, that when any two occurrences happen simultaneously, it is immediately argued that they stand in the mutual relation to each other of cause and effect. It is next to impossible for the spasmodic cholera to change its limits in a thickly peopled country, without some of its inhabitants moving in the same direction with the disease; and an unhappy traveller who sinks under it, is reproached as the cause of the public calamity. If the inhabitants of St. Kilda, who are

all attacked by an epidemic catarrh* on the arrival of every vessel from the main land, reasoned in this manner, they ought to cut off all intercourse with the rest of the world, to save themselves from influenza. Not content with accusing the Indian Medical Staff of being sunk in the Cimmerian darkness of more than Boetian stupidity, and of causing the spasmodic cholera to ravage Europe, from their culpable neglect of duty, the contagionists liberally applaud their own knowledge of science and logic. The following is a specimen of their logic, only worthy of being refuted, because it is often repeated in conversation:—"Formerly," say they, "small pox and measles were considered not contagious; the Indian practitioners think the same of spasmodic cholera; small pox and measles are contagious, ergo the spasmodic cholera is contagious also." This reasoning, applied syllogistically, would, with equal facility, prove sabre-cuts and gun-shot wounds contagious, precisely because naval and military surgeons think the reverse.

My opinions on spasmodic cholera have not been formed without much reflection; nor are they of recent date, got up to serve a purpose; they were recorded in French in 1821, and in English the year following; and though no contagionist, I then stated that Europe may likely come under its dreadful scourge. The event has happened; and now that the epidemic is here, and judging from its previous history, I have no doubt that it will prove only a temporary visitation, as it seems to observe the same erratic and capricious progress in Europe that it did in the East. In the above remarks, I have spoken of the Indian Medical Staff as being unanimously non-contagionists; and till the alarm was sounded

* Vide Macauléy and Boswell.

from Europe, there were none in Bengal, one or two in Madras, and three or four at Bombay, who believed in its contagion; and to this hour I know not one contagionist among all my Indian friends.

THE

London Medical & Surgical Journal.

London, Saturday, March 17, 1832.

PROGRESS OF CHOLERA.

THE total number of cases of cholera, March 14th, in all parts of the kingdom, is 6,144, and the deaths 1,892. We should like to see the total of the cases of fever during the same period, since the appearance of epidemic cholera, with the number of deaths, which we are convinced would equal the numbers and mortality of the former.

The nonsensical mandate addressed to medical practitioners, commanding them to report all cases in anywise resembling cholera, is now modified by another order, "issued to prevent misconception with respect to the nature of the cases to be included in the reports," and it is said that cholera is characterized by the following symptoms:—"A purging and vomiting of fluids, neither feculent nor bilious, with cramps and prostration—to which, in extreme

cases, are added a coldness and shivering, and lividity of the surface, particularly of the extremities, with pulsation of the wrist, and suppression of urine." All these symptoms will not be found in extreme cases, and it is observed that children are seldom attacked with cramps. The expense of the Cholera Boards is £644 per month, or £7,728 per annum.

The discussions at our Medical Societies are mere repetitions, and generally devoid of interest. The only novel feature elicited during the week, was the comparison of cases related by Dr. Thackrah, of Leeds, and said to have happened from 1822 to 1829, which presented all the symptoms of the prevailing epidemic. Dr. Walshman, of Kennington, the oldest and most experienced physician in the metropolis, a gentleman of the strictest veracity, has repeatedly declared at the London Medical Society, that he had seen a cholera as fatal and as general as the present, thirty years ago. Those who advocate the existence of a new disease are, almost without exception, rising men, whose standing is from 12 to 15 years—a period by no means sufficient to enable them to pronounce oracularly upon the characteristics of the epidemic cholera which has appeared at different periods in this country.

We are happy to learn that the new association of that faculty, whose object is a more minute investigation

of cholera, are indefatigable in their exertions; and we trust we shall be able in our next number to report the result of their inquiries.

Notwithstanding the ominous forebodings of the alarmists, the disease is chiefly confined to the distressed poor who reside in unhealthy districts. No new cases of Asiatic cholera have been fabricated during the week.

BARON DUPUYTREN'S LECTURES.

Our arrangements enable us to present our readers with a consecutive course of the lectures now in the course of delivery by the first surgeon in France, or perhaps, in the world. We shall commence them in our next.

MR. GUTHRIE'S LECTURES.

THESE valuable lectures, which are now being delivered at the Royal College of Surgeons, and which are numerous attended, will appear regularly in this Journal in future. As they have hitherto been on the Human and Comparative Anatomy of the Eye, we declined inserting them; but as the learned Professor has now commenced with the Diseases, and as his experience is most extensive at the Royal Westminster Ophthalmic Hospital, and in private practice, his opinions must prove highly instructive to our junior readers.

Royal Society.

March 8, 1832.

Dr. MATON, V. P. in the Chair.

THE sequel of Dr. Marshall Hall's paper "on the ratio which exists between respiration and irritability in the animal kingdom, and on hybernation," was read. Various presents were announced, among which was a manuscript copy of Dr. Black's lectures, taken by the late John Rennie, Esq. F.R.S. Dr. James Clark and Dr. Hope were proposed as candidates for admission.

Medico-Botanical Society.

March 13, 1832.

EARL STANHOPE, President, in the Chair.

HIS Lordship announced the presentation of many splendid works by his Majesty the King of the Netherlands. After the ordinary business was disposed of, his Lordship observed that he was sure the society would hear with much pleasure the inaugural address of a gentleman, whose appointment gave universal satisfaction—he meant the learned Professor of Materia Medica, Dr. Ryan, who would now deliver his lecture.

The lecture was delivered, and will be found in a preceding page. The society then adjourned to Saturday, the 24th instant.

London Medical Society.

March 5th and 12th.

THE debates at the last two meetings of the society were on cholera, and differed in no respect from those of the Westminster Medical Society, which are inserted in a former page. Want of space prevents us from giving them.

LIST OF BOOKS.

Hancock on Cholera and Pestilence; or the nitrous oxide as a remedy, &c.; to which are added remarks on the Piruba, or native oil of laurel; and a hint for placing the domestic vapour bath within the power of the poorest families. Sherwood, Gilbert, and Piper: 1832.

Remarks on the Anatomy Bill now before Parliament, in a Letter addressed to the Right Hon. the Lord Althorp, and given to the Members of either House, on their personal or written application to the publisher; by G. J. Guthrie, F.R.S. London: Sams. 1832. pp. 8.

Dr. Townsend's Chart of the Physical Signs of Diseases of the Lungs. 1832. London: J. Taylor.

Lectures on Midwifery, and the Diseases of Women and Children, as delivered at Guy's Hospital. By J. BLUNDELL, M.D. 1832. 12mo. pp. 420. London: Field and Bull.

A Treatise on Obstructed and Inflamed Hernia, and on Mechanical Obstruction of the Bowels internally; 2nd edition, with an Appendix containing additional cases and observations; illustrated by diagrams; and also strictures on the remarks of reviewers. By HENRY STEVENS, M.R.C.S. London: 1831. 8vo. pp. 214.

A Lecture delivered at the Mechanic Institution, on Cholera; by SIR ANTHONY CARLILE.

NOTICE TO CORRESPONDENTS.

Communications have been received from Dr. Tuthill, Dr. A. Thomson, Dr. Blicke, Mr. U. West, Mr. Bowie, Mr. Sheldrake, Mr. Forbes Winslow, Mercator, Gracchus, Anti-Humbog, An Anti-Contagionist, A Contagionist, A Friend to the Central Board of Health, A Member of the Local Board of Health of Mary-le-bone, Rusticus, Civis, Paracelsus, Edinensis, Pharmacopulus, 3j, An Assistant, Anglicus, Fairplay, An Admirer of De Foe, A Friend to Mr. Thackrah, A Student of King's College, and a Friend of the Church; each of which will be attended to.

The immense number of letters we receive during each week, renders it totally impossible for us to send written replies; but all are impartially noticed.

Mercator.—We are much obliged for the hint; it will be attended to.

Gracchus.—"To err, is human; to forgive, divine."

Anti-Humbog.—The bubble has burst—no sophistry can prevail. The eyes of the profession and public are opened.

Anti-Contagionist.—It was certainly very fortunate that cholera appeared in Sunderland on the return of the three medical members of the Central Board of Health from the Continent. The weakness of the party is seen by the proclamation, calling on medical men to report all cases in any way resembling cholera.

A Contagionist.—We are fully prepared to maintain our opinion, if 100 new cases occurred daily; and we ask, what exempts medical men from the disease?

A Friend to the Central Board of Health.—Will our correspondent have the kindness to state his daily pay as Familiar of the Board, and will he communicate his name and address?

A Member of the Local Board of Health of Mary-le-bone.—This writer little dreams of the facts communicated to us; the less he says the better.

Rusticus.—Fudge!

Civis.—The parishes *must* defray the expenses of Boards of Health.

Paracelsus.—We admit that three-fourths of the works on cholera might be burned.

Edinensis.—We have written to the able and justly celebrated Professor, and should he accede to our request, he will confer a great benefit on science and humanity.

Pharmacopulus.—The Hall dare not oppose chemists and druggists, who will and may prepare prescriptions with perfect impunity.

3j.—Such a proceeding is illegal, and would be punishable by a year's imprisonment, at least,

See Wrapper, p. 2, for continuation of Notices to Correspondents, &c.

LITERARY INTELLIGENCE.

Mr. James's work on Inflammation; rewritten, enlarged, and very much improved, will appear early in April.

Necrology.

On the 29th ultimo, at Horncastle, Lincolnshire, Sammel Trevor, Esq. surgeon, aged 84.

—On the 1st instant, at North Walsam, Norfolk, after a short illness, R. H. Gibson, Esq. surgeon, aged 33.—On Saturday last, at his residence, in Dalton-square, Lancaster, deeply and universally regretted, David Campbell, Esq. M. D. aged 83.—At Eythorne, on the 9th ult. of apoplexy, Mr. John Jeken Kennett, surgeon; a man deservedly esteemed and respected.—13 ult. in Newgate-street, deservedly respected, Mr. Edward Smiles, surgeon, one of the oldest professional attendants of the Newcastle Infirmary.—Same day, at the Shieldfield, deservedly respected Richard Burdon, Esq. aged 76.—Suddenly, on Tuesday evening, the 7th ult. at his house in Summer-hill, in the 76th year of his age, Edward Walsh, M. D., for many years Physician to the Forces.—On the 5th instant, Elizabeth, relict of the late Dr. Erasmus Darwin, (author of *The Botanical Gardens Zoonomia*, and other poetical and popular works), of the Priory, in Derbyshire, aged 84.—Mr. W. H. Thornton, surgeon, Stroud.

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VOL. I.

Royal College of Surgeons.

LECTURES

ON THE

ANATOMY AND DISEASES OF THE EYE.

DELIVERED BY

G. J. GUTHRIE, Esq., F.R.S., V.P.R.C.S.

Lecture the Seventh.

MR. PRESIDENT,

As I have occupied so much of your time with the anatomy of the eye, not only in man, but in birds, beasts, and fishes, I shall take up as little as possible with my observations on the physiology, respecting which there is as much difference of opinion as there is with regard to its minute anatomy. I have already said, that the entrance of the optic nerve in man is not directly parallel with the axis of vision, it is a little more to the inside; the real axis of the eye leads to the central foramen of Soëmmering, and there is a dispute among philosophers whether this foramen is the spot which enables us to see. The entrance of the optic nerve is well known to be insensible, but I believe that other parts of the retina possess the power of vision as well as the yellow spot of Soëmmering, from the fact, that vision has been restored when I have made openings in various parts of the iris, the axis of which openings did not lead to that part of the retina. Some have placed the seat of vision in the choroid coat, and others in the vitreous humour. It will be found very difficult to reconcile all of these points, or indeed any of them; they are still open for future investigation. I consider it to be the sensible part of the retina. The eye is a dioptric instrument, transmitting the rays of light, and refracting them to a given focus; as the light advances in a cone, the diverging rays would be lost but for a certain process, viz. that of refraction. The diverging rays of light passing from a rarer to a denser

medium, viz. through the cornea, are bent inwards or refracted; with this obliquity they pass on to the crystalline lens, at which part a still further refraction takes place, which is continued through the vitreous humour, until the whole rays meet at one point, which is called the focus, and where the diverging rays meet the central ray which passed through without refraction on the direct axis of the eye. When rays of light fall on the cornea obliquely, they diverge in a similar manner, the upper ones cross and become inferior, the lower ones take the opposite direction, thus representing the object inversely on the retina. It is still a matter of dispute how this inverted image is duly represented to the sensorium, so that we see objects as they really are, and not upside down. If the eye is not perfect, the rays may form their focus anterior to the foramen centrale, or beyond it, and the consequence will be in either case that vision will be imperfect. The eye is under the control of the will, and has its time of rest, as well as every other part of the body, independently of sleep. There is nothing more common than for the eye to appear to be intensely gazing at people, and yet not to see them; I am sure I may say so, for it has happened to myself very frequently, and has offended many valuable friends, who have supposed that I meant to cut them. It requires an effort to draw the eye from this state of abstraction or rest, which I believe is accomplished by bringing the eye forwards by the two oblique muscles, when the eye is further fixed by the four recti muscles, their tendinous expansion tending also to make pressure on the ball, and to alter its form. Sir Everard Home says, that the cornea is made more prominent, and the eye is thus enabled to refract a little more than before; others deny this, and aver that they have never been able to discover any such alteration. It is more probable that this process, which is called adjustment, takes place internally, the pressure of the tendinous expansion giving that support which is requisite for its per-

formance. The striated fibres at the back part of the uvea of the iris are supposed, by other philosophers, to draw forwards the ciliary processes, and with them the vitreous humour and the crystalline lens, changing and altering the situation if not the form of both by this action; whilst those changes in the motion of the pupil are going on to which I alluded at such length when on the motion and sympathies of the iris.

The eye, when naturally formed, is a perfect instrument for the purposes for which it is intended; the individual sees things distinctly when held at a proper distance, which is called its focus, and by a little adjustment of the eye it is rendered capable of perceiving objects at a further distance. Many persons, however, cannot see at that further distance, and these are called myopic. I believe that this state of the eye usually commences about the age of 13 or 14. About the time of puberty, a particular change takes place in the eye, which gives to it a greater refractile power; it is said that it existed before, but was not discovered, which I very much doubt. Mothers are usually attentive to the pleasures of their children, and soon find out when they cannot see a cow or a tree at the proper distance, or a letter in their book. At the age alluded to the child stoops, and when corrected, says it cannot see unless it does so, and the fact of short-sightedness becomes evident. Glasses are the only remedy when the thing is established, but if the change was early perceived, I am inclined to think that the application of a leech every night for some two or three weeks, then omitted and again resumed, might have a good effect in preventing what appears a too rapid development of certain parts of the organ. As persons advance in life, they begin to find that they cannot read so well at the same distance as before; and this too comes on at a particular period, generally between 40 and 50. If you try them, you will find that they can see very well at a proper distance; and this many people, more especially literary people, and those who have studied optics, will find out for themselves. In this case the eye has lost a part of its refractile power; it has been supposed that the cornea has become flatter, but it is difficult to prove it; a change is going on in the eye at that time analogous, but in an inverse manner to that which took place in childhood. This you also remedy much by glasses. If you wish for further information on this subject, you may read Dr. Kitchener's work with advantage, not that on Cookery, but his *Art of Preserving Sight*; the information is conveyed in a pleasing as well as useful manner. In choosing glasses, you must take those which do not cause you to see objects larger, but merely brings them before you as heretofore. At the end of every four or five years it will be necessary to change the glasses; the eyes are then said to

be getting older, and a glass of 36 inches focus must be changed for one of 30.

With these cursory observations, Sir, I shall conclude this part of the subject, which would require a separate course of itself, and shall proceed to speak of the thousand and one diseases of the eye—as we are told there are—and shall commence with the most serious; and first of—

INFLAMMATION.

General inflammation of the eye-ball may be either simple or specific; simple when it arises from common causes, or specific when it arises from some peculiar cause in the system. It may be acute, passive, or chronic.

Simple idiopathic inflammation of the eye-ball generally arises from exposure to cold, the most common cause of all inflammations. It generally affects the sclerotic and choroid coats, subsequently the cornea, and to a certain extent, the other parts of the eye. It has generally been considered that this inflammation is of a rheumatic kind, because certain signs, indicative of rheumatism, are present. I have shewn that the sclerotica is a fibrous structure; and all fibrous parts when subjected to inflammation, give rise to a pain of a peculiar kind, increasing at certain times in the evening and at night rather than in the day, whence the inflammation has been considered *specific*. When inflammation takes place in the periosteum, which is likewise fibrous, the pain is nocturnal, and it was supposed that these nocturnal pains indicate the presence of venereal disease, but I believe that such pains always occur in inflammation of the periosteum, whether venereal or otherwise. The same was supposed to obtain in rheumatism; and as inflammation of the sclerotica has also pain increased at night, it was supposed, on these grounds principally, to be rheumatic, but, I believe, without good reason.

When the sclerotic and choroid coats are inflamed, the patient complains of pain, which is very remarkable; it is situated in the upper part of the ball of the eye, but not confined to it alone, and extends around the brow, and in the course of the fifth pair of nerves, in the malar bone, and in the inside of the nose; the pain is often excruciating, and is the worst pain either patient or surgeon can have to deal with. It indicates inflammation affecting the sclerotic coat, attends inflammation of the choroid and of the iris, and accompanies all chronic alteration of these structures; when it has continued for any length of time, mischief always takes place, and it is followed either by total blindness, or defect of vision. There is a peculiar fact as regards this pain in chronic cases, which is, that it continues as long as any sight remains, but when vision is totally lost the pain disappears, and the loss of one, and the departure of the other, are nearly coeval. This shews the sympathy that exists between

the organ of vision and the fifth pair of nerves. This pain, whenever it exists, is always accompanied by defective vision. If you look at the sclerotica, you will perceive that it has lost its peculiar whiteness; the vessels are full of blood, passing in straight lines towards the cornea, the diverging vessels meeting near that point; in acute inflammation they advance directly to the cornea; in the chronic state they stop at a short distance from it, leaving a distinct line around it. The conjunctiva covering the sclerotica, partakes more or less of the inflammation, its secretion becomes thickened; the lacrymal gland also becomes irritated, and an increased flow of tears takes place, but not that violent lacrymation which occurs in other inflammations, for the eye occasionally is hot and dry; there is also an increased secretion from the meibomian glands. The red appearance of the conjunctiva and sclerotica can be readily distinguished from each other; the vessels of the sclerotica pass in straight lines, are of a pink colour, and immovable—while the conjunctiva exhibits always the vessels reticulated, red, not pink colour; and on moving the eye they are perceived to roll. The cornea has not, from the first, its natural transparency, it never has, in fact, in internal inflammations, and is more or less muddy, as well as the aqueous humour. The iris, shortly after the inflammation has shewn itself, will be perceived to have undergone a very evident change. I have said that it changes from its natural colour when more blood is sent to it than usual; the blue eye becomes greenish, or of a faded gooseberry colour; the dark one a red brown. [If the inflammation is confined to the sclerotic and choroid, and the iris is not affected, the pupil does not feel the influence of the change of colour in the iris; but when the iris is really inflamed, the pupil is always contracted, but in this case the pupil becomes dilated in consequence of pressure from behind; and this is an important point in the diagnosis, as indicating the seat of the inflammation.]

As the inflammation proceeds, a change takes place under the conjunctiva; it separates from the sclerotica, and a fluid is interposed, which constitutes chemosis, and this deserves great attention. When the sclerotica is inflamed it throws out a fluid; the fluid is partly serous, partly albuminous, and occasionally is more solid. When the inflammation is erysipelatous or rheumatic, the conjunctiva then appears like a bladder filled with water, is transparent, and ought in such case always to be treated by stimulants.

The conjunctiva swells, and overlays the cornea, to the edge of which it is too firmly attached to be separated, so that the cornea can only be seen at the bottom of the cup or hole thus formed, instead of appearing a convex body. The secretion from the conjunctiva now becomes at first like coagulable lymph floating in serum, and then more puriform in

character; this collects in the cup formed by the conjunctiva, and when it is washed out the cornea appears opaque, and when it has gone thus far, I believe that nothing can save the eye. This is the course of general inflammation of the eye-ball; it will be modified by various causes.

Treatment.—This disease is one which runs its course, to the destruction of the organ, in a very short space of time, and requires a corresponding vigour of treatment to prevent so unfortunate an occurrence. If the patient is seen before chemosis has taken place to any extent, and whilst the cornea is transparent, it is likely that the eye will be saved; but if the cornea is muddy, the chemosis considerable, and the patient scarcely able to see, it will generally be lost, in consequence of the cornea sloughing. From a simple diminution of transparency, it becomes opaque, of an ash colour, and loses its life; during a violent paroxysm of pain, the patient feels as if something had burst, the eye-lids fill with water, and instantaneous relief is the result. On examination, we can perceive where the slough has given way; through which opening the aqueous humour has been evacuated; the cornea is flattened. I have sometimes seen nearly the whole of the cornea slough out at once; it is more common for it to do so in part; it is much more rare to find merely a rent, with the iris lying against it; through all of which openings, however made, it eventually protrudes.

The disease being idiopathic, soon gives rise to constitutional symptoms, the pulse quickens, becomes fuller and stronger, and the symptomatic fever augments the other evils under which the patient labours. To cure these, or even to prevent mischief, blood must be drawn largely and generally; bleeding is the sheet anchor on which we must depend, and it may be done from the arm, or from the temporal artery, so as to give rise to a marked effect, viz. syncope, and unless a quantity of blood be drawn before it supervenes, the inflammation will not be subdued; from twenty to forty ounces will not be too much, and if the pain returns an hour or two afterwards, the bleeding must be repeated to a less extent, and the blood may now be drawn from the angular vein, or by cupping on the temple. I rely much, after this, on a regular drain being kept up by the application of leeches in relays of six or eight at a time (none being placed on the upper eyelid) until the pain is removed.

The next best remedy is the colchicum. I prefer the wine of the root, and in an extreme case of this kind I give ʒj every two hours for three doses, and then every four hours, with a little magnesia, until the effect of it is produced, particularly purging and great prostration; it is a powerful remedy, and should be used cautiously, or rather watched carefully; but it must be given effec-

tively if it is to save the organ. It is ten times more valuable as a remedy than tartar emetic, which has been so much lauded, but which, in my opinion, does harm when it vomits, and little good when it only nauseates. I rarely have recourse to it in acute disease, except as a diaphoretic, although I consider it of great value in many chronic complaints as an emetic. Calomel and opium are very effective in relieving pain, and whilst I give the colchicum in draught, I order the other two in pills, two grains of calomel and one-third of a grain of opium every two hours, until sleep is procured. If ptyalism takes place it will rather do good than harm, and particularly if any ulceration of the cornea has occurred. I am, I beg to be understood, speaking of males in the lower class of life, for this is a complaint which rarely takes place in any other. I have never seen it in females even in the middle classes of society, and those in the lower ranks who suffer from a disease of this nature may in general be treated similarly to males of their own condition. An additional grain of opium may be sometimes necessary at night to procure sleep and prevent the accession of pain, and opium finely powdered and made into a sort of paste may be applied to the brow with advantage; but it is on bleeding you must rely to effect these objects, and if it is not done by the end of the second, or at all events the third day, the eye will rarely be saved from disfiguration. If the chemosis form a cup around the cornea, reducing it in appearance one half, and rendering it opaque, the eye will be lost. It is a disease, therefore, which must be cut short in the beginning, and at some hazard to the constitution of the patient; if it be allowed to go on with little assistance, and the eye is destroyed, I am not sure the patient will be as well at the end of a fortnight or three weeks, as he will be if the eye be saved by very decided treatment.

In regard to local applications, I simply use them to keep the part clean; warm ones generally appear to be most grateful and to afford most ease, and they should be made of opium, or other narcotic remedies. When the active inflammation has been removed, then local applications of a mildly stimulating nature will often render effective service, with regard to the state of the conjunctiva and cornea. Of this we shall speak hereafter.

St. Bartholomew's Hospital.

SELECTIONS FROM THE CLINICAL LECTURES

DELIVERED BY
W. LAWRENCE, Esq., F.R.S.,

During the Session 1831-32.

GENTLEMEN,

Caries of the spine, is generally attended with those symptoms which usually denote inflammation going on in a diseased bone, such, for instance, as pain, &c. A similar destruction of a portion of the vertebral column is a disease which begins in the bodies of the bones. It generally commences first with inflammation, then we have ulceration, which is succeeded by caries; though the spine may be for some time unaffected. Pain and inability to move the limb are generally the first symptoms; darting pains are felt in the extremities, the patient loses, as it were, all controul in locomotion; matter forms, and extends along the cellular membrane; or it might point externally by abscess.

Generally this disease comes on very insidiously, and spinal curvature develops itself gradually, and exists for some time before it either causes pain or irritation to the patient. As the disease advances, shooting or twitching pains are experienced by the patient; involuntary movements of the lower extremities; paralysis of the sphincter ani and bladder, and a deranged state of the system exists. These symptoms, however, do not always occur, they are only occasional; and though this disease appears so formidable, the patient gets quite rid of this degenerescence by nature. The destruction usually takes place in front of the column. When this disease has terminated, it sometimes leaves the patient greatly deformed, the parts having been brought into contact by slight ossification, and leaving an angular curvature of the spine; and it is surprising that though matters are thus arranged, the spinal canal is not in the least reduced in size, consequently there is no direct pressure made on it. The curvature in these cases, as I have already said, is angular. As regards the treatment, gentlemen, in such cases, it will be absolutely necessary for the patient to have rest, and by all means to be kept in the horizontal position. If there be pain you might take blood away locally; the diet would depend upon the constitution, but the more nourishing and easy of digestion, the better.

Counter-irritation is highly valuable in this affection, produced either by the antimonial ointment, moxa, or seton. The tart. ant. is exceedingly advantageous in removing the paralysis, which is the most annoying and

WESTMINSTER HOSPITAL.—On an autopsic examination of a man who had been for some time under treatment for amaurosis, and who died of erysipelas of the head, the optic nerves were found flattened, and deprived of their medullary matter throughout their whole course.

dangerous symptom. Where the constitution is in any way feeble or broken down, either by disease or dissipation it is not advisable: for instance, in persons of a scrofulous or strumous habit of body. Where the individual is feeble, tonics with rest, and a nutritious diet, will be very advantageous. Machinery has been recommended so as to prevent curvature from taking place, but it is decidedly objectionable, inasmuch as it prevents curvature from forming, which is absolutely necessary in order to perform a cure.

The case is called paraplegia when the lower half of the body is paralysed, owing its origin to some injury inflicted on the spine, such as a fall, sprain, blow, &c. But it is astonishing that this may take place when there has been no apparent cause, and in such cases it will be requisite for you to attend to the head. Hemiplegia is where one side is affected at a time.

Spina Bifida, or Dropsy of the Spine.—This is generally the product of some malformation in the spine. The part has very often been perforated with small needles, in order to evacuate the fluid; however, such practice is hardly advisable, unless the case be a very favourable one. A truss has also been recommended, but has failed. The disease may continue till the adult age, though very few infants who become the subject of this disease seldom survive.

Neuralgia.—Injuries of nerves sometimes originate from being divided in operations. You all of course are aware how painful and annoying this affection is, for instance, tic-douloureux. These affections are often relieved by soothing applications to the affected part. Counter-irritation is very valuable in these cases, by causing irritation over the origin of the nerves, which supply the affected part. Tetanus sometimes supervenes after such injuries; and in books it is stated, that if this disease does not come on at the end of the third week after the injury has been inflicted, it will not appear at all; however, experience has taught me otherwise. In a man who was a patient in this hospital a short time ago this was well proved. He had received an injury, and after three weeks he had a tetanic motion (for I can call it nothing else) of the whole of the muscles of the leg, and which extended to the face. It was thought for some time to be assumed, and particular attention was directed to the limb, when the convulsive motion was as great as ever. The muscles, during these paroxysms, were very tense, particularly the muscles of the thigh. All the remedies recommended were tried in his case without much effect. Sometimes he would improve a little, and at others he would relapse into a very bad state, and so much so that at times I began to be apprehensive of his death. At his wish he left the hospital for the country, where he resided, stating that he thought pure country air might eradicate the complaint. He has arrived in

town, and has been seen by one of the dressers, who says he is much improved, and when he is able will walk to the hospital to show himself to me.

Sciatica is also another affection of nerves, equally troublesome. It is the result of inflammation of nerves. Mild antiphlogistic means are often very advantageous. Much depletion in these cases ought to be avoided, as it will do more harm to the patient than good. Rest, narcotics, with attention to the digestive functions, constitute the ordinary treatment. These cases are very tedious, and particularly so when chronic. The irritation which it excites generally causes a derangement of the system, and greatly impairs the patient's health. Continued irritation by blisters, or tart. ant. over the nerves, is probably the best practice that can be employed.

Tic-Douloureux, is another neuralgic affection, and like the rest has hitherto puzzled the practitioner. In this affection, as in all nervous affections, you must attend to the general health, produce counter-irritation, and so on. In this affection, you must carefully examine to see that no bone, or carious tooth, is present to cause or give rise to tic-douloureux. If there is any thing that presses on the nerve, and thereby causes irritation, we must, if it lies in our power, remove the exciting cause. We ought to use, as in the other cases, narcotics, and I think the ext. conii is preferable to any other. Tonics also are very serviceable.

The orbital, infra-orbital, and superciliary nerves have been divided where they just come out at the foramina; but an operation is little more than useless.

In many cases of neuralgia you are not able to find out the cause. You must examine most carefully the course of the nerve; and until you find out the cause of the pain, the affection will be obscure to you. I have mentioned to you, this session, a case where great pain was induced by the pressure of an aneurismal sac on the nerve of the arm, and causing great pain to the patient. When the centre of the nerves, as it were, is affected, various branches will become deranged; such, for instance, as when there is disorder of the sensorium, the patient's vision will become affected, though the nerve of the eye is not diseased.

In cases which are characterized by involuntary movements, loss of sensibility, and in short, exhibiting the usual neuralgic affections, we must examine, most minutely the affected part, and direct our attention to the nervous system. This is much better, and will be found more advantageous than following the practice of Lowe, and that is, by going through a regular routine of "nervous medicines," as they are called.

Phlebitis, or inflammation of a vein, gentlemen, I had occasion to allude to at a former meeting. I told you then that there was a man who had been in this hospital, and who

was affected with this disease. I further stated that this case terminated favourably. Since then we have had in the hospital another man who also had phlebitis, and I think I may say that this case has also terminated favourably, as I think the man quite out of danger. The latter case was a much severer one than the former, and, notwithstanding, both have done well.

There have been many cases in this hospital, but the generality of them have terminated unfavourably. It has been found that pus has been deposited in the interior of joints, and also in their exterior. It also has been deposited into the lungs, liver, &c. and there has been no inflammation; though physiologists say, that the reason why these cases terminate so fatally, is owing to the pus which forms in the vein, and which passes into the circulation, and inflammation being attendant, or going on at the same time. It is certainly true that there are cases of phlebitis on record, where inflammation has been absent; however, I must say, that there are some cases where there has been inflammation, and which has been found after death.

In treating this disease, one of the grand and great objects in view is, to prevent the suppurative process. I will now relate the second case of this disease that happened in this hospital, it being a subject of great importance.

J. B. came into the hospital on the 24th February, with an inguinal hernia. He was put into a warm bath, and bled, and the usual remedies employed in such cases. When he got better he left the hospital, and on returning home he took the bandage off the arm, and for the first time felt great pain in the arm; and in feeling the cicatrix, the substance under his finger felt quite hard, and looked, as he called it, "rather angry." He was brought to the hospital, and on examining the arm I found that the usual symptoms were present. I felt the vein quite hard, resembling a cord, a sure sign that the coats of the vessel are thickened, and that it is enlarged; it was also red, the redness extending to about two inches. I ordered three dozen leeches to be applied to the arm, and to be followed with a bread and water poultice. I also directed his bowels to be opened by jalap and calomel. The next day the swelling had extended, and he had passed a very restless night. I ordered twenty-four leeches more to be applied immediately.

On the fourth of March he was seized with rigors, a common circumstance, gentlemen, in these cases, and it must always be looked upon as a very dangerous one; it is a sign that the suppurative process has begun; it attends not only this disease but many others. The next night the man was quite delirious; inflammation had extended to the axilla and down the fore-arm. Its course sometimes is

different from the circulation. It was first confined to the basilic and axillary veins, but it extended to the cephalic and down to the bend of the fore-arm. The integuments covering the cephalic vein were quite red, and it was as thick as the little finger, which clearly showed that there was great inflammation going on. He spent another restless night on the 8th; the part was still inflamed. I directed forty-eight leeches, and here, gentlemen, I must observe, that in cases of this description the application of one or two dozen of leeches are scarcely of any use. If you wish to do good you must apply between three and four dozen.

As he had a restless night on the 8th, he was ordered a quarter of a grain of morphia and a 3j of the tincture of hyosciamus. From this time I think he may be said to be improving. He continued the narcotics, and their effects were of the most beneficial kind. The redness was gradually disappearing; the pulse became regular, and the tumefaction was greatly diminishing. The 11th, the hardness still continued. The 14th, the tongue was coated with a thick white fur, and I ordered him calomel and James's powder, in combination. When the tongue indicates a vitiated state of the alimentary canal, the combination mentioned will be found highly valuable, and in this case it had the desired effect; his appetite and general health were much improved; and in consequence of the debility which arose from the depletion, I ordered him a mutton chop daily, with cascarrilla, columba, and the like.

The arm was now examined, and there was a fact which is very interesting in a physiological point of view; the cephalic, basilic, and axillary veins were quite hard, and I have no doubt that the cavities are obliterated. This is not an uncommon effect when the disease has run its course, and then terminates naturally.

I have brought this case forward, and dwell thus long on it, as the disease is one which requires great attention, and is of frequent occurrence.

Fracture of the Neck of the Thigh-bone.

Gentlemen, you will recollect my having alluded to a case of fracture of the neck of the thigh-bone, in a female, in the hospital. This woman, after the fracture, walked from the Surrey Theatre to her residence, a distance of a quarter of a mile. She managed to sit until the entertainments had concluded, when she leant, I suppose, on the arm, or assisted by her friend, hobbled home the best way to her residence, the distance I have named. About three weeks after the injury she was brought to this hospital, and was under the care of Dr. Hue, when I was requested to see her. The appearances that were exhibited by the hip were of an exceedingly doubtful kind. Several other surgeons belonging to this hospital saw her also, and

from its obscurity we differed in opinion; but finally, however, we determined that it was a fracture of the neck of the thigh-bone. On examining, we found the foot turned outwards, the trochanter projected most unnaturally, and, in fact, it appeared that the neck of the thigh-bone was in the acetabulum. On fixing the pelvis steadily by the hands, the limb could be drawn down to its full extent, and become as long as the other, which was inconsistent with dislocation—consistent with fracture.

The treatment, gentlemen, was in this case very simple. The woman was placed on a particular bed, which is constructed for such cases; and in a short time after she was able to lie on a common bed. The rest of the treatment was the common practice pursued in these cases; and the greatest difficulty in this instance was to determine whether it was a case of fracture, or of dislocation, the former being the decisive opinion after a great deal of difference on the point. She will recover with little or no deformity. This woman is six feet high, and the loss of an inch or two will not be much to her, particularly when she can so well put up with the loss. I examined the limb to day, and really there appears to me to be not such a great deal of deformity as a medical man might have been led to suppose.

I am glad, gentlemen, that I have an opportunity of showing you a tumour which I removed from a lady this day. There are tumours that surgeons cannot decide what their structure is; now this is one of that very grade. It would lead one readily to suppose that this tumour is a portion of a scirrhus one, that had undergone some change; and on the other hand, we have fibrous matter shooting through it. It only differs from scirrhus tumours in not possessing its stony hardness. This tumour I removed from behind the angle of the left jaw. In its surface it was loose, and moveable; its boundaries could not be felt, it gave no pain whatever, not even when pressed, and it was hard.

The history of the case is as follows. A lady, aged 30 years, has been affected with this enlargement for some time. About seven or nine years ago she had a tumour operated on by a surgeon, which occupied the same position as this did, and which by her account was very similar to this that I removed. I think that her former operator had only cut off a bit, and left some part remaining from which this sprung. I had great difficulty in insulating it below, and that arose on account of the arteries which lie about that part. I had so much trouble in extirpating it that I thought it advisable to cut off a piece first, and then dissect the remaining portion away. I could not see or feel the boundaries of this excrescence. The lady informed me, that she was nearly killed by erysipelas, which supervened on the last operation. To prevent this from taking place, I let the wounded ar-

teries bleed to some extent, and by this plan avoided that most unfavourable occurrence. The wound was then brought together, and treated on ordinary principles.

I showed this tumour to many gentlemen, and amongst them to my colleague, M. Stanley, who gave it as his opinion that it was scirrhus. However, it is not scirrhus; no pain was present at any time; though it might justly be remarked, that scirrhus has an indolent stage, which lasts for some time; but then that state of indolence is succeeded by a state of great pain, darting pains being felt by the patient. And further, in scirrhus the disease extends to all the surrounding parts, which was not so in this case; it also does not contaminate the absorbent glands as scirrhus affections do. Many cases of this kind have fallen under my notice, and they have not resembled scirrhus in the points which I have mentioned. The adhesions in scirrhus affections are quite absent in this. I think that it is natural to the part, quite mild, and not in the least malignant. It is an astonishing fact, that in all the cases which I have seen, the tumour has been situated in the left side.

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,

During the Session of 1831-32;

BY BARON DUPUYTREN,
PRINCIPAL SURGEON OF THAT HOSPITAL.

False Aneurism of the Brachial Artery.

It is generally believed that venesection is a very simple operation, and one that requires no particular attention. This notion, I think, may be traced to that depreciation into which manual surgery has lately fallen. But to this cause is it owing that so many of the accidents, which we have witnessed for the last twelve or fourteen years, have occurred?

The hospitals are filled with pupils who altogether neglect the performance of venesection, and these again are followed by a more considerable number of young men who are received there without ever having practised the operation at all. Many a time have we seen in the wards of this hospital, and out of doors also, five or six punctures made in a patient's arm before the vein was properly opened; and there can be no doubt that it is to this want of skill that we are to attribute the phlegmon and inflammation which we so often see supervening in such cases. To the same cause, I fear, we are to

ascribe the very large number of examples of *phlebitis* which, during the period spoken of, have been presented to us, and which were at former periods so exceedingly few. The foulness, or bad condition of the instrument employed, is frequently the source of some of those calamitous results. In short, all these cases of arterio-venous aneurisms, whether diffused or circumscribed, to which our attention has been of late so largely directed, may, for the most part, be referred to the neglect of the first principles which I have just pointed out.

I have already shown to you two cases, in each of which the operation had to be performed, at the close of 1831, and both of which got well. I have no doubt, whatever, that I shall have the opportunity of bringing similar examples under your observation in the course of the present year. I can say, with strict truth, that for fifteen years not one twelvemonth has passed without, at least, two cases of these aneurisms being placed under my care. If other surgeons have a similar account to give of their practice, you will be able to estimate the extent to which these cases exist.

Gentlemen, to guard against the consequences which I have been now considering, you need only have recourse to the very simplest precautions. The principles which you may regard as permanently established, with respect to the operation of bleeding, are the following:—

First, that you should never attempt to use the lancet without feeling for the pulsation of the artery at the bend of the arm.

Secondly, that you should never make your puncture in the veins situated over the artery; and,

Thirdly, of course, that you should select a vein in some other situation.

I am aware that you may experience some difficulty in finding in those other situations a vein sufficiently distinct, or large enough to afford the quantity of blood required. But this is an inconvenience which is as nothing in the balance when compared with the risks which you encounter by acting contrary to the principles laid down.

I was anxious, gentlemen, to call your attention to the above circumstances before proceeding to the regular subject of the present lecture.

Custom has given sanction to the employment of the phrase *false aneurism* as descriptive of that species of tumour which consists of blood, and is situated either in the sheath of an artery, or in its laminated tissues. Sometimes the tumour makes its appearance immediately after the infliction of the wound; at other times a considerable interval elapses between the moment when the puncture takes place, and the time when the aneurism becomes manifest.

There are two kinds of aneurism resulting from the injury now under consideration.

The one is called *primitive*, or diffuse aneurism; the other is distinguished by the title of *consecutive*, or circumscribed aneurism. These differences, you will at once see, are produced by the manner in which the effusion of blood takes place, jointly with the date at which it occurs.

Other distinctions may be traced between aneurisms in the arm; these are referable to the particular parts in which the aneurismal tumour is situated; they may be said generally to belong to the class of *consecutive*, or circumscribed aneurisms. The walls of the sac are composed of cellular tissue; for the blood oozing, as it were, drop by drop, forms layer after layer, and thus a cavity or cyst, of variable size, is created, which communicates with the artery by the wound that has been made in its diameter.

Now, in some cases, this sort of process takes place:—the sheath of the artery will cicatrize under the effects of pressure, which is the common application employed in these cases: that is to say, whilst the wound of the sheath is united, the wound of the internal tunics of the artery remains free and ununited. The compression being removed in such a state of circumstances, what is the consequence? This—that the lateral impulse of the blood in the artery will have the effect of pushing forward the filamentous covering of the artery: it will absolutely separate this covering from the fibrous tunic, and will ultimately elevate it into a cyst, which deserves the name of aneurism.

But, gentlemen, we have instances in which the wound of the artery has been completely healed, in consequence of the accession of an adventitious membrane over the divided part. This new membrane consists of concreted albuminous matter exhaled.

We have the results of experience on wounds of arteries, and from these we learn that wounds of these vessels have been completely obliterated by a small quantity of coagulum of exactly the size of the wound remaining in it. When this coagulum has been accidentally removed, a circumscribed false aneurism is the consequence.

True aneurisms of the brachial artery at the bend of the elbow, are extremely rare. There is, indeed, only one well authenticated case of the kind, that by Pelletan, in his "*Clinique*." The observations of Polletta and Plajani, which have been mentioned by Scarpa, are not sufficiently precise, and, indeed, the same remark as forcibly applies to the statements of Saviard and Hodgson.

Gentlemen, false primitive and consecutive aneurisms are not the only diseases which may affect the brachial artery. The artery may be completely opened, as I have already said, by the ignorance, neglect, or unskilfulness of the operator in venesection. The latter description of aneurisms were those which were alone known to, or, at least, understood by the ancients. Galen, Celsus,

and Aëtius, have noticed them in their respective works. I may observe it, as a singular fact, that injuries of this kind, and their consequences, should never have led even to a suspicion of the nature of the circulation. You will, perhaps, be surprised to hear, that even after the glorious discovery of the circulation, no scientific man could determine the course which the blood might take after a ligature had been placed upon some principal artery. Heister was the first to discover the anastomoses of the branches of arteries. Before his time, the fact of the supply of blood to the arm, after the tying of the brachial artery, was accounted for by the supposition that there was a second artery in the arm. Sharp was the individual who endeavoured to establish that belief; but shortly afterwards Molenilli, in the acts of Bologna and Charles With, accurately demonstrated the process of collateral circulation. Pelletan, still more lately, exhibited the power of the anastomosing vessels by injections, in a case where the brachial artery had been spontaneously obliterated. Half a century, gentlemen, has produced a very decided improvement in this department of science. We now know, with precision, the effect of the anastomosing power.

London Medical Society.

March 5, 1832.

DR. BURNE, President in the Chair.

The discussion on Cholera was resumed.

DR. STEWART remarked that the severe forms were confined to the poor, and that was a fact worth knowing, as it would lead to the adoption of prophylactic measures. It would appear, that an attention to what the old writers termed "non-naturals" was an essential part of the prophylactic measures—quarantine regulations were perfectly nugatory, as the disease had appeared in spite of that regulation. The proper measures were in our power, and that was bettering the condition of the poor in a much more efficient manner than has yet been attempted.

Dr. Whiting corrected an error in the last minutes; he had not said that hot air had been injected into the intestines. He did not agree with Dr. Stewart, that the disease was more

common in the [lower classes of society than in the higher; it certainly might be more fatal in the former class of individuals; but the disease was very generally prevailing, and would attack the rich as well as the poor. He was continually meeting cases of diarrhoea, and himself and pupils were affected with it; and it was a spasmodic affection of an anomalous character. If remedies were employed in time, this affection would be easily stopped, and no serious consequences ensue. Confinement to bed, anodynes, and in the cases with spasm, venesection would be sufficient to remove the affection. The disease would not take a serious turn, but if neglected till profuse discharges from the bowels and stomach took place, then it would put on a formal aspect: but this was not an essential character of the disease. The disease, Dr. W. thought, would spread over the kingdom; but if the early symptoms were brought under proper treatment, few cases would terminate fatally; in the state of collapse there is little or no hope of recovery. Of the cases of this kind that he Dr. W. had seen, one only recovered.

Mr. Shearly stated that he had under his care the poor of a work-house in his neighbourhood; he had provided the master of the establishment with a medicine to administer promptly in cases of diarrhoea, and every case had gone on favourably. Many of such cases had arisen from checked perspiration; they had been called by some cases of cholera, but he did not look at them in that light. He believed the town to be at that time very healthy, and none more so than the parishes of St. Saviour's and Newington, Surrey. Mr. S. greatly condemned the supineness of the higher classes, in respect to attention to the wants of the poor, and expressed his conviction that their want of liberality would be punished by a visit of the cholera.

Dr. James Johnson concurred with Dr. Whiting in the prevalence of this

disease in all classes of society.* In the latter classes the disease was mild, and easily managed, and the degree of malignancy was in precise proportion to the wants or comforts of the patients:—the neglect of early medical treatment in the poor was an important feature as regarded its fatality amongst them. Dr. J. strenuously denied that the medical men of London had exhibited a desire to spread alarm amongst the public on this subject, as some of the newspapers had asserted. Dr. J. then explained how the cases in the Marylebone Parochial Infirmary had been incorporated in the reports of the Central Board of Health. The cases had not been reported by the medical officers of the Institution. Dr. J. regretted that Dr. Sigmond had been refused admittance to the Infirmary; this refusal (he Dr. J.) was sure did not emanate from the medical officers of that establishment. Dr. J. referred to the description of the disease which he had previously given. There were six grades under which cholera presented itself. There would be, first, slight indisposition; secondly, slight diarrhoea; thirdly, a more confirmed diarrhoea; fourthly, dysenteric symptoms; fifthly, spasms; sixthly, coldness and collapse followed by blueness and all the severe forms of the disease.

Mr. Smith exhibited the stomach of a patient who had died of the disease. The stomach unquestionably shewed evidence of inflammation, believed to have been produced by a mustard emetic. The other morbid appearances were related by Mr. Smith.

Dr. Gilkrest remarked that M. Andral had concluded that there were no morbid appearances peculiar to cholera; and this was also the opinion of M. Magendie.

Mr. Stephens stated his belief in a very general epidemic influence, at

this moment prevailing. He thought the contagious properties of this disease were fully disproved; the effect of the morbid agent, from whatever cause arising, appeared to him to be a poisoning of the blood. Mr. S. entered into a physiological review of the symptoms of this disease, in order to prove the deleterious change effected upon the blood; pointing out particularly the difference of the condition of the system in the state of collapse, and the asphyxia produced by submersion, suspension, &c.; in the former state, if the heart could be made to act vigorously, the due change in the blood would follow; but in cholera, the deterioration of the blood was of such a nature, as to defy altogether the ordinary restorative measures; and was there a reagent to this poison, and one that would neutralize the poison in the blood? Mr. S. then adduced his reasons for believing that mercury would be found, if fairly tried, and made to exert its full influence on the system, to possess the power of alleviating the poisoning influence of the disease.

Dr. Shearman asked why, if there were not something essentially peculiar to the disease, prophylactic measures should be called for more at this, than at any former period? Usually cases of diarrhoea terminated spontaneously; very seldom indeed demanding medical treatment. This was not the case now; there must be, therefore, something specific in the disease now prevailing. What, then, was the essential circumstance of the disease?

Dr. Blicke contended that there was nothing peculiar or specific in the disease prevailing. It was neither more nor less than the epidemic which had always prevailed, and always would prevail, in the country; he saw nothing but difference in the degree of the symptoms; he saw no difference in the collapse of cholera, the disease ordinarily seen in this country.

Dr. Ryan admitted the prevalence

* Two thirds of the cases in his private practice were grades of the disease.

of an epidemic. It was absurd to suppose that the disease was imported, or that it was of a contagious nature. Most of the cases reported as cholera were fabricated ones. The Central Board of Health were culpable in admitting such cases. Dr. R. referred to the Mary-le-bone cases, and thought that the members of the Board of Health, instead of avoiding societies like this, would do well to attend their meetings. Dr. R. saw no reason to conclude that the disease would, in its severe forms, be universal; that was a declaration calculated to excite alarm. Dr. R. recited some cases, shewing that it bore no analogy whatever to Asiatic cholera, but it was merely an aggravated form of English cholera. There was certainly existing now a predisposition to bowel complaints, or severe diarrhoea, arising from some peculiar state of the atmosphere. Dr. Ryan did not agree with Mr. Stephens, that the effect produced by the disease was a poisoning of the blood; its primary effect he (Dr. R.) believed was some impression on the nervous system.

Mr. Kingdon concurred with Dr. Whiting in the view he had taken of the disease.

Dr. Whiting, in reference to Dr. Ryan's observation, explained that he had not said that fatal cases would be occurring amongst the rich as well as the poorer classes of society; the tendency of his observation was to shew that the profuse vomiting and purging, and all the terrific symptoms, were not necessary or essential characters of the disease; but that the predisposition to forms of the disease was prevailing very extensively; that attention to the preliminaries symptoms would render the disease mild and tractable.

Mr. Bradford thought that the profession should come to some conclusion in respect to the non-contagious character of the disease; that the public mind might be easy on that point.

Dr. Walshman said that he had seen the disease prevail to a great

extent about thirty years ago, and at that time no one believed that it was contagious; it generally occurred in the month of October, and it was most successfully treated, first by chicken broth, and afterwards by opiates.

Mr. Headland concurred in the views taken of the disease by Dr. Whiting and Dr. Shearman, and other gentlemen, who regarded the disease an epidemic of a specific nature, and conquerable only in the first, or less violent stages.

Dr. Stewart remarked the present tendency of disease to assume a choleroïd character, even with the most comfortable classes of society; and related some very unpleasant and oppressive feelings about the heart, which had occurred to him, after returning from a visit to a vessel lying in the river. His feelings were as if a degree of paralysis were in operation on the heart and lungs.

The meeting then adjourned.

March 12th.

DR. BURNE opposed the non-contagionists, and Dr. Uwins warmly and ably defended them. Want of room prevents us from giving the report of this discussion.

March 19th.

DR. JOHNSON rose to comment on the minutes, and to defend Mr. Thackrah, whose veracity was questioned by Mr. Walker.

Mr. Walker explained, and passed a high eulogium on Mr. T.

Dr. Williams, Dr. Blicke, and Dr. Ryan supported Dr. Johnson.

Dr. Burne repeated his views on cholera, and contended there were three stages of the disease; but was of opinion that the premonitory diarrhoea ought not to be considered cholera.

Dr. Whiting dissented from the last opinion, and held the disease to be contagious.

Mr. Salmon replied, and maintained that the cholera originated

from a poison in the atmosphere, which, in his opinion, produced disorder of function, and not disease of structure. In all cases, there was a suppression of the cutaneous excretion; and if this be admitted, all these symptoms could be explained very easily.

Dr. Williams, Mr. Hooper, and Mr. Evans, asserted that there was perspiration; to which Mr. S. replied, such fluid contained no carbonic acid gas.

Mr. Stephens opposed the doctrine of Dr. Whiting, and adduced many arguments to disprove the contagiousness of the disease.

Mr. Hooper related some cases of cholera under his care; he was not a contagionist, though he thought the facts of daily occurrence might induce him to change his opinion.

Mr. Holt read the notes of a fatal case of cholera, and exhibited the stomach, bladder, and uterus. He also stated that he bled a patient while the spasms were urgent, and with decided success.

Mr. Hooper detailed a case in which the spasms were more violent than any he had seen, and were relieved by bleeding. Dr. Johnson saw the man, a sailor, and he was quite well next day.

Mr. Burt inquired of Dr. Whiting, whether he considered the disease contagious?

Dr. Whiting did not consider he had said it was contagious.

Mr. Bradford contended Dr. W. had said so, and was supported by Dr. Blicke, Dr. Ryan, and Mr. Salmon.

Dr. Whiting thought it more prudent to decline entering on that question, but should be ready to do so at any time; but, it appeared to him, another evening should be occupied with the discussion.

Mr. Kingdon was of opinion that the premonitory diarrhoea should be considered cholera, and that all such cases should be reported; and if this were done, the public would be

able to see that the disease was really of comparatively trifling fatality.

Dr. Blicke stated that cholera attacked an army in India, on its march; next day, many died; the General gave a countermand; forced marches were made along the direction to the former quarters, and the disease suddenly ceased, which was a full answer to the idea of contagion. The Indian writers did not consider the disease infectious. He (Dr. B.) considered cholera the same in all countries, but modified by climate, &c.

Mr. Proctor denied the unanimity of the Indian writers, as stated by Dr. B., and he could quote some against it.

Dr. James Johnson produced extracts from sixty-five reports of the Madras Board, in which there was no mention made of the premonitory diarrhoea in cholera; it appeared that the sufferers were struck at once with the stage of collapse, from which they were generally relieved by blood-letting. In this country, this is the second stage of the disease, and all know what little good was effected by venesection. Neither was there any mention made of the consecutive fever in the Madras reports; it therefore appeared to him that the diseases were very different; and with respect to blood-letting, it was only advisable in this country, when the spasms were violent. He believed that the premonitory diarrhoea was cholera, and he had seen forty cases of this disease in private practice during the last fortnight, which, he was satisfied, would have terminated in the cholera of Southwark, had they been neglected. He considered that the facts he had now adduced were of great practical moment, and well worthy the consideration of the society.

[We do not pretend to give full reports of the proceedings of this or the other societies, but merely the substance of what is said.—*REP.*]

Westminster Medical Society.

Saturday, March 17.

DR. STEWART in the Chair.

MR. BADGLEY was elected an ordinary member.

The secretary read a paper by Mr. Dobson, describing the cholera as it appeared at Leeds and its vicinity in 1825. The symptoms detailed presented all the characters of the epidemic prevailing at present in London. Mr. D. gave a most graphic description of the disease as it presented itself at Cawthorpe, and also of the diarrhoea which preceded it, and dysentery, which was occasionally consequent on the diarrhoea. The discussion which followed was sufficiently animated, but presented no new feature, and, consequently, is not of sufficient interest to be detailed.

Mr. Costello introduced a man, on whom he successfully performed the operation of lithotrity. This person was the picture of health. A ludicrous mistake was made by a gentleman, who supposed the man had had cholera. He inquired whether "he had shiverings before the disease came on?" The man replied, "shiverings! Lord bless you, no; it began with scalding of water."

Foreign Intelligence.

EXTRAORDINARY EXAMPLE OF COLOSSAL SIZE;

A man nine feet ten inches in height.

By ALEXANDER THOMSON, M.B.

A FAMILY of silk weavers, living in the quarter St. Jacques, of Paris, consisting at present of a father, mother, and child, all of whom enjoy uninterrupted and vigorous health; the former two, ever since their marriage, have continued to live, ever since the marriage of the parents, upon four pounds of coarse wheaten bread, and one pound of beef, daily; these substances being so distributed,

that one fourth of each is eaten by the mother, one fourth by the child, and two fourths by the father; in addition to these substances, they take nothing during the day, but a little coffee, not remarkably strong, in the morning; and when business is remarkably flourishing, once upon a time, by way of holiday feasting, a few vegetables, such as *haricot bean*, *cabbage*, or *potatoe*. The husband is from Caen, forty-five years of age, nine feet, ten inches (English measure) in height, and very robust and fat; the wife is from Lyon, thirty-four years of age, about five feet (English) in height, and very strong and muscular; the child is also strong and healthy, and nine years of age. The parents have been married eighteen years, the whole of which period they have dwelt in the same part of Paris; the wife has produced six children, and is now three months gone with the seventh; has suffered very little during her accouchment, except in the first; and has never, while nursing, consumed more than the quantity of food already mentioned, nor felt any want of more. Five of the children died from convulsions during the period of teething. The mother attended me as a sick nurse, living with me in the house, and sitting up night and day for near five weeks. She consumed so little food as to be remarked both by myself and the master of the hotel, with whom she dined.

ACETATE OF MORPHIA.—THE EFFECTS PRODUCTIVE OF NAUSEA, VOMITING, AND HICCOUGH.

Case of ———

By ALEXANDER THOMSON, M.B.

MADAME PERUSHER, aged about fifty-five, married, and mother of several children, of a leuco-phlegmatic constitution, came to attend me as a sick nurse, on the 11th Sept. 1831. I myself, though I had taken my usual potion of one grain of acetate of morphia, to ease the anguish of an arm

inflamed from dissection, did not sleep so soundly as I could have wished, being constantly disturbed by the scraping of the same note continually upon an old cremona, issuing from the neighbouring chamber of an *Æsculapian amateur*. Thus routed from a comfortable slumber, at about one, p. m. I found that my nurse, who was reclining upon a mattress in the same chamber, had not yet succeeded in gaining any repose, and complained of not having had any for some nights back; I, therefore, recommended her to take one of the one-grain powders of the acetate of morphia, which I had by me for my own use, to divide it carefully into three portions, to throw away two, and swallow the remainder, mixed in a little water. This she did, and retired to her couch for about half an hour. She complained of a remarkable nausea, retched violently, and vomited profusely, bringing up slimy, frothy mucus, coughing frequently, and hiccoughing, without being able to expectorate. Upon inquiry, I found that she had been ill for the space of three weeks, with an affection in the chest, which she had entirely neglected, and for which she had not asked advice until the morning of the day in question. Her physician having found difficulty of breathing, and a hard, dry and suffocating cough, unrelieved by expectoration, had ordered her to be immediately copiously bled; an ordinance to which she, from prudential and pecuniary reasons, had not submitted. She had therefore done nothing during the day but nurse the inflammation, by drinking large quantities of milk, yet these facts by no means explained to me the extraordinary symptoms, which followed so soon after the administration of the acetate of morphia. These symptoms endured with unabated violence, for the space of an hour and a half. The pulse was reduced to about sixty, and, though scarcely perceptible, was extremely regular. Yet there was no fainting, no cold perspiration, but a tempera-

ture of the extremities rather above that which is natural; I now thought that the only thing which remained for me to do, particularly as every one was gone to rest, and I myself a cripple and confined to my bed, was to combat the evident bad effects of the acetate of morphia, with such stimuli as I had at hand, and I therefore gave her successively and at short intervals two half-tumblers-full of *Vin de Macon*, a light black wine, not much stronger than the *Vin ordinaire*; the symptoms, however, increased in violence, in spite of the wine, which both times she rejected. The nausea was more constant, the vomiting more frequent, and the apparent suffocation more imminent: it was not half past 3, p. m. or two hours since the acetate had been taken; I made her rouse the master of the house to ask for some brandy, of which I made her drink an ounce in half a tumbler of cold water, sweetened with sugar. As she rejected this also, after having retained it on the stomach longer than the wine, at the end of five minutes, I made her immediately take the same quantity. She gradually lost the nausea, and the irritation of the head and chest; and fell, in about half an hour after the last dose of brandy, into a tranquil slumber, which lasted without interruption until seven o'clock in the morning, when she was suddenly awaked by the entrance of the master of the house. She had slept soundly, without dreaming, and felt very much refreshed; but upon getting up, she found her head again swimming, and the nausea returning, so that she was soon obliged to yield to the inclination to vomit. I lost no time in sending her home to re-consult her physician, whose advice she had so shamefully neglected. Upon inquiry also, I found that the powder had been made up by the druggist's apprentice, and apportioned by him at guess from a mass of six grains weighed in the scale, so that more than the third of a grain may have been taken, yet the quantity will not explain the pecu-

liarity of the symptoms. She remained during the remainder of the day extremely nauseated, but did not vomit again. Her physician saw her, postponed the bleeding, ordered repose and some emollient ptisan or drink; the next morning she fell into a violent perspiration, which lasted all that day and half of the next, leaving her weak, but entirely free from any unpleasant symptoms.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

YOUR correspondent $\Delta\Delta$ wishes me to reconcile two experiments of Sir Charles Bell's with the theory which you did me the favour to insert in the first number of your Journal,

1st, Whether irritation of a nerve produced contraction of the muscles it supplied? I suppose that the stimulus acted in the same manner as volition does, by giving a sudden shock to the nerve, which, being communicated to its ultimate distribution, caused it to suspend its restraining influence.

2dly, Whether division of the same nerve produced paralysis? I certainly answer to this, as $\Delta\Delta$ says I may, by quoting a part of my paper—"that division of a nerve produces paralysis by interrupting the communication of volition." The objection that the communication was kept up by other branches of the nerve, will apply to all theories on the subject as well as to mine; whatever may be the nature of the operation of volition, it appears that the remaining communication was insufficient for it, and surely if it was insufficient for it, according to other theories, it may be allowed to be insufficient for it according to mine.

Your correspondent E. B. begins by deprecating altogether the promulgation of new theories, and pays rather a curious compliment to your Journal, by saying that its chief value will consist in checking their growth.

Individually I need not complain of so severe an observation, as it applies to *all* theories, past present, and to come. This writer says, that the theories to be checked are *ignes fatui* and *parasitical growths*; but who is to decide in what is mere matter of opinion? What E. B. considers parasitical growths, others may look upon as a more marked development of parts proper to the body of science. To follow up the metaphor, and *vice versa*, an opinion has lately been put forth, contending that there is no such thing as *gastric juice*. Is this a parasitical growth? E. B. perhaps, will say it is, and perhaps he will say it is not, just as his own opinion on the subject happens to be. Again, I say who is to decide in affairs of this sort?

After having attempted to cough me down by sarcasm, E. B. proceeds to argument. His first argument proves the truth of my theory as much as any thing I could have said myself. He says that spasm depends on impairment of the governing power, and that stimulants relieve spasm by invigorating that power. I should be glad to know what he considers to be the exact nature of that governance of the nerves, which being *weakened* or *impaired*, produces muscular contraction, and which being *invigorated*, restores *relaxation*. That relaxation is the quiescent state of a muscle, I do not attempt to deny, nor that paralysed muscles are always relaxed. The doctrine of inherent contractility is upheld by many eminent physiologists, and I merely suppose that a muscle will *act* when left to itself i. e. when freed from foreign influence, it will display its inherent tendency: of course when it does not *act*, it is quiescent. I really cannot see why, according to my theory, the coachman's mouth should have been habitually located in the paralysed check. When a muscle is paralysed, it is permanently condemned to the restraining influence of its nerves; the proximate cause of paralysis being, I suppose, such an affection of the *origin*

or course of a nerve as shall prevent the communication of volition. When a muscle is removed from the body, its nerves, as E. B. very correctly observes, are removed with it; their restraining influence not being derived from the brain, continues in operation, and when we apply a stimulus, the shock of which is to suspend that influence, the muscle contracts.

If E. B. reads carefully over the experiments of Dr. Charles Henry, to which he alludes, he will find the identical experiment on which I founded the observation, "that though certain sedatives applied to a portion of a nerve prevent the extremities of that nerve being acted on by a power applied above the seat of the injury, yet they are readily acted on by a power applied below it. This, undoubtedly, proves that isolation from the brain does not deprive a nerve of its properties, whatever may be the nature of those properties.

The stiffening of the body after death is attributed, by Mr. Grainger, to a peculiar species of muscular contraction universally exerted, and this he denominates the *tonic contraction* of a muscle. If, as E. B. says, it is merely the stiffening which all bodies undergo on cooling, why does it not continue as long as the body remains cold, or until it is actually decomposed? And why does not it take place under all circumstances, for bodies always grow *cold* after death? Many physiologists contend that the blood in the *venæ cavæ* is propelled into the right auricle by the atmospheric pressure, in consequence of a vacuum formed there by its dilatation. As this dilatation takes place prior to the entrance of the blood, the gush of blood cannot be said to force it open. How does it open? But whether the heart does or does not actively dilate, is of no consequence to the validity of my theory. E. B. had better attack those who contend for the vacuum I have mentioned, for I rested on their opinion when speaking of the action of the diastole of the heart; perhaps I

relied on an *ignis fatuus* or *aparasitical growth*.

If, according to E. B. the governance of the nerves be a stimulating influence, without which muscles "have no contractile power," how can they be convulsed when they have lost "all governance of the nerves?"

Having concluded his arguments, E. B. again has recourse to sarcasm and ridicule, and he even goes so far as to say, that though it should be demonstrated and proved to his satisfaction, that I had hit upon the real nature of the contrivance had recourse to by nature, he would not hesitate to say she had made a "*clumsy*" piece of business of it. But as E. B.'s arguments are no refutation, far less so is his ridicule, and he will probably find it quite as difficult to *prove* that my views are incorrect as that his own are correct. One would imagine, however, from his carelessly severe and sarcastic style of writing, that in his own idea, he was merely crushing, *en passant*, an utterly insignificant reptile. Verily I am amazed that he should have taken the pains to write a long letter to disprove what, judging from his tone, appears to him so clumsy and absurd as to carry with it its own refutation. It is possible, nay very probable, that my theory may deserve all the opprobrious epithets he has bestowed upon it, and as such I am very willing to give it up, but I must first have better and more conclusive evidence against it than that adduced by our friend E. B.

I remain, gentlemen,
your obedient servant,
R. U. WEST.

March 12, 1832.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

If the following case is worthy of a place in your valuable and scientific Journal, you will oblige by inserting it.

As a poor woman about 52, was wandering through Gerrard-street,

fell, apparently dead, opposite my door, about five p. m.* I had her conveyed immediately into the surgery, and stretched before the fire, she being very wet and cold. This by the assembled mob was immediately pronounced as the dreadful effect of cholera; this, however, I took no notice of, but proceeded, without delay, to excite again the heart into action, which had already ceased † beating. For this purpose, I got down her throat, 1 dr. of rectified æther, and 4 drs. of gin, and repeated the dose at the expiration of five minutes, adding 1 dr. of paregoric. The pulse soon after the exhibition of the last dose became perceptible, beating about fifty strokes in the minute, and respiration visible to all present. Withholding a short time the stimuli, treating with what had been taken, and by increasing the strength of the fire, she would rally after a little patience. In this however, I was deceived, she grew colder than at first, and the pulse became almost imperceptible, the heart's action a mere flutter; and the stimuli, although now poured in as at first, produced but little effect. I now gave up all hopes of renovating her, and accordingly gave my opinion as such to the sergeant of the police, who was in attendance: and whose duty it then became to report it to his senior in rank, which he did. Unwilling to relinquish my endeavours, I placed on the dorsan of the tongue ij grs. of calomel, and one of opium, gradually washed down with 4 drs. of gin. This once more raised the spark of life, and I flattered myself all my labour had not been bestowed in vain, and from this time animation gradually augmented, and by half past eight p. m. I found she had taken of æther ʒj. paregoric ʒiij. gin ʒiiii. opium, (combined with calomel) ij. grs., calomel grs. vj. and my patient now exhibited, in a mild

degree, compound symptoms of narcotism and intoxication; and as the pulse had risen to near 90, and convulsions were become strong and frequent, I abstracted from the arm 8oz. of blood, which at first flowed as black as any blood I had ever before witnessed, and cholera again pressed heavily upon the minds of the attendants. This checked the violence of the convulsions, and the breathing became freer and more natural as this latter step and had rather increased than decreased the circulation, I made bold to take from her, by emetics and warm tea, what had in the first place saved this poor miserable being's life; and as the action of emetics ceased, sensibility returned. Having thus far accomplished my end, I dispatched the policeman to provide for her accommodation in the poor house of this parish, which, after some difficulty was obtained; and in the mean time ascertained that she had actually subsisted solely on a potatoe and a morsel of bread for the last three days, and for the last two nights had been destitute of the meanest lodging. Soon after 10, p. m. she was conveyed to the poor house, and next morning I was informed that she had passed a tolerable night, and was doing well. In conclusion, had this poor woman died, a coroner's inquest would have been the result, but what the coroner's verdict, I leave it to others to decide, at this critical period, and beg to remain,

Gentlemen,

Your constant reader,

J. W. HORNE,

5, Gerard-street, Soho,
14th March, 1832.

* Tuesday, March, 6th 1832.

† Or beyond detection.

On the Utility of Studying the Greek and Latin Writers of Antiquity, on the subject of Medicine. By the late Dr. FALCONER.

(Communicated by John Small, Esq.)

“Propius ad Fontes accedite Medici, atque haurite affatim, percipietis inde quam sagax, quam admirabilis fuit Priscorum diligentia—videbitis utique non minus ingeniosam fuisse antiquitus observationem, quam nostram rationem.”—Huxham, Pref. ad Vol. Alter. de Aere & morbis Epid.

It may appear a matter of surprise to mankind that it should be necessary, in this age, to recommend to the students of a liberal art, an acquaintance with the history of the opinions that have prevailed in it. The lawyer who desires to shine, is not satisfied with the knowledge of the law in its present form. He wishes to investigate its origin, and to review the various stages by which it arose to its present state of improvement; and to notice the opinions of men of eminence in the profession, even though they should not accord with those which in our times are regarded as rules of conduct. He does not adopt the sentiments of former lawyers as indisputable authority, but he looks upon them as useful in suggesting subjects of discussion, and exhibiting questions in a variety of lights, which may at last possibly lead to the discovery of principles, or modes of practice, that may stand the test of ages.

The astronomer, however convinced of the truth of the Newtonian system, does not disregard the labours of Ptolemy, Tycho Brahe, or Descartes. He respects even the errors of these illustrious persons, and finds instruction, as well as entertainment, in tracing the series of opinions that have led through paths, however frequently deviating, to the knowledge of truth.

To sum up all; the moralist, although possessed of a system of ethics confessedly infinitely superior

to any with which the sages of antiquity were acquainted, still acknowledges the present utility, as well as merit, of the works of Plato, Seneca, and Epictetus. The concurrent testimony of these great writers, is no small confirmation of the certainty of any speculative opinions; and the beauty and strength with which they are enforced, tend strongly to the same purpose.

The fathers of medicine are no less respectable than the first cultivators of the other branches of science. Hippocrates, justly styled the parent of the art, is prior, in date of time, to any Greek prose writer now extant, an indisputable proof (were there no others,) of the merit of his writings. Should any one now take upon him to depreciate the value of this author, who has been the subject of admiration to mankind upwards of two thousand two hundred years, we may safely tell him that he comes too late with his discovery. It is a disgrace to the common understanding to suppose that any other cause but real merit, could have preserved the reputation and character, as well as the existence of these writings, through such a succession of ages. It is not meant to be denied that the medical writers of antiquity have, at different periods, like Homer and Aristotle, been extolled in a manner equally absurd and extravagant; as if the foundation of every discovery was peculiar to them, and every counsel they gave was to be esteemed as the dictates of unerring wisdom. This superstitious veneration is no less repugnant to common sense, than contrary to the opinion the principal of these writers we know conceived of himself. Hippocrates, it appears, was forward to confess his errors, conscious, probably, as his commentator suggests, that nothing was so becoming to a man, who was sensible he had merit enough remaining to support his character. Our advantages over our forefathers in medicine are no doubt very great. The improvements in anatomy, chemistry

materia medica, and, I may add, natural history, have furnished immense acquisitions to the healing art. Still, however, I would assert, that the ancient authors preserve their value. Though disfigured by the ravages of time, and the loss of parts of the writings of the same author, that might have cleared up many of the difficulties that now remain unexplained, and being calculated for a country very different from our own, the works of Hippocrates contain so much originality of sentiment, such a just description of the changes to which the mind and body are liable by disease, and such an accuracy of observation of the causes that were likely to have produced them, and of the effects of such remedies and applications as he had in his power to employ—that, abstracted from the veneration attendant upon antiquity, we must place him in the first rank of those who have benefitted mankind by their literary studies.

It has been the fate of the works of the early writers on the subject of medicine, to have suffered more from the intemperate zeal of their friends, than the malignant opposition of their adversaries. The fond admiration with which they were at one time perused, ascribed to their opinions, as I have before mentioned, a degree of infallibility. Modes of practice, and theories in medicine, were not examined by the standards of reason and experience, but by their consonance or disagreement with the doctrines supposed to be laid down in Hippocrates and Galen. To be able to understand these writers, was thought a sufficient qualification of itself for a medical practitioner, and to explain and comment on them was esteemed the principal business and employment of the professors of the art at the universities, and till very late, this was expressed in several of the diplomas.

This immoderate respect generated another evil nearly connected with it. Commentators arose both numerous and voluminous; who, not contented

with the obvious and plain sense of the words, endeavoured to find out meanings that were never meant, and to form a theory and system for the authors to which they were utter strangers. Incapable of relishing the simple, yet elegant narrative, and of admiring the veracity with which facts are related, the nicety with which observations are made, and the judgment and caution with which any decisive opinion is formed; all which qualities particularly belong to Hippocrates and Aretæus, they were anxious to discover in those writers something similar to their own visionary ideas and opinions, and have in pursuit of these phantoms tortured and perverted the meaning, and probably much corrupted the text, in order to make it correspond with their fantastic notions. This custom began very early, since traces of it are to be found even in Galen, and his successors did not fail to improve by the example. Mistaking the means of raising his character, they in reality degraded the man of diligent observation, veracity of narrative and of cautious, yet often exquisite judgment, into a subtle logician and pedantic sophist.

If then we would read these writings with advantage, we must consider them as detached from their commentators, and fortunately for learning, most of those bulky works in medicine, as well as ethics, are now consigned to more useful, though more ignoble purposes. We may then survey the original writers in their native dignity, and prejudice apart, I will venture to pronounce that every gentleman of the profession who will take the trouble, will find his toils rewarded. I do not mean this as referring only to that kind of knowledge, which is rather matter of ornament and literal information, than of mere practical importance; though the former of these is an accomplishment by no means to be neglected by those who wish to preserve the character of their profession as being one, whose professors are peculiarly

remarkable for their acquaintance with literary subjects in general. But ornamental acquisition is the least advantage that may be reaped from attention to these pursuits. I am, I think, justified in saying, that several improvements in practice, which are usually esteemed, comparatively speaking, modern discoveries, are to be met with in the medical writers of antiquity, and we have reason to think many more remain, which prudent, diligent, and candid investigation may bring to light. These I have neither abilities nor leisure to anticipate. I have, however, selected such instances of the former, as will, I trust, shew that this opinion of mine is not void of probability, and may serve also to excite more able persons to remove the reproach of omitting important information within our own reach, or of attributing inventions to modern times, which we ought to have known belonged to former ages.

The cool regimen in fevers, so judiciously and successfully recommended by Sydenham, from observation and experience, was the invariable practice of the early authors on medicine. Hippocrates advises the free use of water and vegetable infusions to be taken cold, in fevers arising from bile and in ardent fevers, and observes the good effects of them in promoting salutary evacuations by stool and urine, a practice recommended in the same complaints by Aretæus, and for the same reasons, and which has been successfully repeated in our own country by the ingenious Dr. Kirkland. The practice of Sydenham in giving *diluent liquors*, together with *opiates*, in the *cholera morbus*, which he mentions as being contrary to that of his time, is exactly consonant to that recommended by Hippocrates. Aretæus and Cælius Aurelianus strenuously advise the drinking of cold water in the same disorder, which Dr. Cleghorn tells us he had been assured by the physicians at Minorca, had been found remarkably successful. The external application of cold

water in constipation of the bowels, used by Hoffman, and by Dr. Stevenson, in the cases related by him in the Edinburgh Medical Essays, to the good effects of which I can also bear testimony, is advised by Hippocrates, and the injection of cold clysters for the same purpose, is frequently recommended by the same author to procure stools.

I would not, however, mean to be understood as recommending the perusal of the ancient writers, to those who are entering upon the study of medicine. They are not properly intelligible without much previous reading and knowledge, not only of the preparatory branches, but also of the best practical authors; but to those who having finished their preparatory studies, are desirous to enlarge their minds, and extend their knowledge of facts, and compare their own observations with those of former ages, and thereby confirm their truth; to persons of such liberal sentiments, these studies open a comprehensive field for improvement. Perhaps it is with a view of preventing a premature attention to the ancient writers among the students of medicine, that Dr. Cullen, in the preface to his Synopsis, endeavours so much to depreciate their general character, and the advantages which others have supposed might be obtained from a diligent examination of them. But the consonancy of their observations to what takes place in a considerable degree in this country, and still more in such as come nearer to the climate for which Hippocrates wrote, has been proved by accurate and unprejudiced experience. The late Dr. Huxham, and the late Dr. Cleghorn, to both of whom the above character unquestionably belongs, have done justice to the writers of antiquity, by the simple, but decisive method of comparing the old accounts of disorders, with those that fell under their own personal inspection. Surely the eminent person, who has spoken so lightly of his early predecessors, must have had a higher opinion of the ac-

curacy of the observations of Hippocrates, than his expressions in other places would lead us to imagine; since he has adopted, not only the ancient system of critical days, but seems to have given entire credit to the numerous cases adduced by that author, in support of this doctrine. As a testimony of his approbation, he has quoted a passage from the learned and sagacious Dr. Gaubius, expressing his veneration for, and confidence in the fathers of medicine, with which I shall conclude this paper.

“Fallor ni sua constiterit Hippocrati auctoritas,
Galeno fides, naturæ virtus et ordo.”

[The above paper was read before the London Medical Society in 1788, and is copied from the unpublished original manuscript, by our studious and industrious correspondent. We so fully assent to the sentiments of the author, that we insert it with pleasure.—Eds.]

London Medical & Surgical Journal.

London, Saturday, March 24, 1832.

DECLINE OF CHOLERAPHOBIA.

THE reports of the last week, including cases “anywise resembling cholera,” were much too favourable for the alarmists, and have given a final blow to choleraphobia. The greater part of the public looked upon the statements of that unfortunate body, the Central Board of Health, with sovereign contempt, and considered that they were issued for selfish or political purposes, as a “diversion,” “a tub to amuse the whale.” As scientific journalists, we must renounce politics; but must observe,

that we have all along contended, there is a formidable epidemic raging since last summer in this part of the kingdom, which has been, during the last four months, greatly increased among the poor, who reside in insalubrious districts. We must repeat our former position, that there is no proof of the disease being communicable from person to person, or of being of foreign origin.

Nothing can shew the necessity of medical reform in so strong a light, as the position maintained by the profession with respect to cholera. Thus we had first the appointment of a Board of Health, consisting of a half a dozen Fellows of the Royal College of Physicians, of whom not a single member had observed cholera, either in India or in Continental Europe, or who possessed the slightest knowledge of the habits, constitution, or state of destitution of the poor. It was, therefore, to be expected that the proclamations of this body could have little weight with the profession or the public. But it could not be supposed that the monopolists of the College would consent to an association with the members at large, and least of all, with surgeons, both of which orders are considered *infra dignitatem*; so that those who were in most practice among rich and poor, and who were best qualified to observe and treat the epidemic, were entirely excluded; and the public was to endure all the horrors excited by the idea of pestilence, because, forsooth, their high mightinesses of the Col-

lege could not suffer the winds to blow between them and their nobility. Such was the injurious effects of collegiate monopoly on the profession and on the public. The members of this Board were also remunerated for their services. We are proud to state that their example was scarcely followed. The disease appeared at Edinburgh—a Board of Health was formed there, consisting, not of half a dozen unemployed favourites, but of the most eminent physicians of all orders, surgeons, and apothecaries, all acting harmoniously—many who had been in India—many professors, many attached to hospitals and dispensaries, and many in the first practice; all visiting the abodes of misery, without the slightest remuneration. What a noble proof of the philanthropy characteristic of our profession! We need not remind our readers of the complete dissatisfaction given by the Aristocratic Board, which speedily led to its dissolution. It was succeeded by another pigmy of monopoly—the Central Board of Health, of whose imbecility, duplicity, vacillation, and mendacity, all the world is cognisant. We were the first who fearlessly exposed the suspicious conduct of this body, and the absurdity of placing there army surgeons, “all honourable men,” as the rulers of the profession in London. These gentlemen, for whom we entertain respect as individuals, could not, by possibility, be acquainted with the habits and diseases of the poor of this city, having been chiefly employed abroad,

and had not their vanity and self-love rendered them so giddy as to recollect place, and to forget the etiquette they owed their seniors, and their reputation also, they would have recommended the government to add a few hospital and dispensary physicians to their body, whose observation and experience on the diseases of the poor would have been most valuable. But the fact is, the profession have been treated as if deficient in understanding and knowledge—as if they had not sense to feel, or spirit to resent. The most ridiculous regulations were dictated to them by this Board, and they were ruled with a rod of iron. It naturally fills us with resentment, to reflect upon the conduct pursued towards our profession; and now all admit, that they have submitted too long to the dictation of this body.

At the period at which this Board was formed, the health of the City was supposed to be endangered—suspicion was a just ground for inquiry, but why did not this body enter upon it with candour and decency? It concealed information as long as possible, intending, perhaps, to astonish the world when we least expected it. A dark and ambiguous system was pursued, a series of the most inconsistent recommendations were issued daily, which scandalized the profession, and excited the astonishment of the public; proceedings odious and contemptible took place, whose effects were ruinous to the trade, commerce, and lower classes of this country.

The most virulent exaggeration of the dangers of the disease was incessantly made, to frighten the people, which is now obvious to the narrowest capacity. The whole profession now joins us in considering that an incompetency and a fatality attended every measure proposed by the Central Board of Health. The medical press of London and Edinburgh, at least the scientific part of it, opposed the doctrines of the Board, and maintained that the epidemic cholera was not contagious, but might, like other epidemics, become contingently or conditionally infectious; and that all quarantine regulations were useless and injurious.

We had the *Medico-Chirurgical Review*, the *Edinburgh Medical and Surgical*, and this *Journal* on the right side; and the *Lancet*, the *Medical Gazette*, and its *frere de lait*, the *Physical*, on the other. Is there a member of the faculty in Christendom, acquainted with medical literature who does not prefer the former authorities to the latter? Who looks upon any one of these journals as authority? But the toad-eaters of the Board have used every exertion "to foist the *Lancet* and *Gazette* upon the medical public;" and they received a plump refusal in every instance. Even the proprietors of one of these journals have given us every opposition, and endeavoured to dissuade the public press from making extracts from this periodical; and when this foolish attempt was scouted, their organ accused the whole of the press of defrauding the revenue by

publishing extracts from this journal, which saved us advertisement duty—an assertion totally false, as regards us, for our advertisements were, and are, daily before the public. The public press was not to be tampered with; it diffused our opinions throughout the world, and events have proved their accuracy. Where now, we triumphantly inquire, are the proofs of the contagion of cholera? Have not all the efforts of the alarmists of the Central Board and its satellites proved abortive? This body may well exclaim with a double-dealing courtier of old;—

"Farewell—a long farewell to all my greatness!

This is the state of man: to-day he puts forth

The tender leaves of hope: to-morrow blossoms,

And bears his blushing honours thick upon him;

The third day comes a frost, a killing frost,

And when he thinks, good easy man, full surely

His greatness is a ripening, nips his shoot;

And then he falls as I do."

Yes, the Board has ventured far beyond its depth; its high-blown pride has broken under it, and left it to the contempt of all classes of society. It will remember "the ides of March," though it has been repaid "with power, honour, and title," and with a total loss of respect on every other side, but one

Though the Government and its Medical Board have attempted to "frighten the isle from its propriety," nothing has been done, to this hour, by either, to shew the real proportion of deaths from cholera, to the mortality from other diseases. According to the last census, the population

of England, Scotland, and Wales, is 16,537,398; the average deaths 1 in 54, the annual deaths 306,433, the daily 840. Now the whole number of deaths said to be caused by cholera during the last four months, and no one will admit the number to be correct, is 1927, or little more than two days' deaths throughout the country. Is not this the strongest proof that the alarm with respect to cholera has been highly exaggerated. It further appears by the returns procured by numerous individuals, that the mortality is not greater in this year than in former years; and it was even less than usual in London the second week after the appearance of cholera.

It must be also recollected, that many of those who died of the disease would, in all probability, have died of other maladies, had no cholera existed.

There can be no doubt, however, of the existence of an epidemic, which is certainly neither Indian nor common English cholera, but which has been observed before in this country, and is well described by Sydenham and the older writers, and by Dr. Walshman and Mr. Thackrah, who are living witnesses. This proves that the disease is not of foreign origin; was not imported; is in the atmosphere, and, perhaps, caused by terrestrial emanations; and is not to be arrested by restrictive measures.

"Diseased nature oftentimes breaks
forth

In strange eruptions: and the teeming
earth

Is with a kind of COLIC pinch'd and vex'd
By the imprisoning of unruly wind

Within her womb, —————"

ON MEDICAL EDUCATION.

The Study of the Ancient Medical Authors.

IN a former page we have inserted a paper read many years ago before the London Medical Society, by the late Dr. Falconer, entitled, "The Utility of Studying the Greek and Latin Writers of Antiquity, on the Subject of Medicine." We wish to direct the attention of the Courts of Examiners of the Royal College of Surgeons, of the Society of Apothecaries, of the Army, Navy, and East India Medical Boards, to this admirable essay, in which they will find conclusive evidence of the necessity and importance of requiring their candidates to be acquainted with the ancient medical writings.

No one who reads the essay alluded to, can entertain a reasonable doubt on the propriety of the members of the profession being acquainted with the ancient records of medicine, which inform them of the rise, progress, and practice of the healing art. Some few, who wish to shorten the path to the portals of science, urge untenable objections to this study, which we shall refute in our subsequent remarks. It is sufficient to state, at present, that the imperishable works of Hippocrates, Dioscorides, Celsus, Aretæus, Galen, Avicenna, Bonetus, Morgagni, Harvey, Huxham, Highmore, Willis, Sydenham, F. Home, Rutt, Haller, Heberden, Hoffman, Baglivi, Lieutaud, &c. &c. are frequently quoted by all learned writers and lecturers on medicine. We are aware that many

depreciate the ancient writings on the healing art, and that some have wished them to be consigned to the flames; but upon this absurd opinion we need not comment. We regret to indite the fact, that Cullen did great mischief by his sweeping condemnation of the early records of medicine, as appears in his work on *Materia Medica*. He observed—"there yet remains another British writer to be mentioned, and that is the late worthy Dr. Ritty, of Dublin, the author of the *Materia Antiqua et Nova*. He tells us, it has been a work of forty years, which to me, who think there is little to be learned from the ancients, is no great commendation." This was an extraordinary declaration from one, whose fame was almost based upon the opinions which he derived from the sources which he so unsparingly depreciated. His censure was, therefore, uncandid and unjust; and his work, to which the above passage was prefatory, can scarcely be compared with the *materia medica* of Hippocrates, and many others, and is now nearly obsolete, while the ancient writings upon the same subject are esteemed and revered. It would have been but common justice in the Edinburgh professor, and in some of his present successors, to have admitted, what every candid cultivator of medicine must admit, "*multum egerunt qui ante nos fuerunt sed non peregerunt, multum adhuc restat operis, multumque restabit; neque, ulli nato post mille sæcula præcludetur occasio aliquid adhuc adjici-*

endi." We fully agree with Dr. Falconer, that a vast fund of valuable information, much of which is offered as new by the superficially educated, is to be found in the writings of the ancients, and especially in therapeutics. Indeed, there is scarcely a remedy now in use that was not employed by them in its natural form. In proof of this position, we shall insert a list of the Hippocratic *materia medica* on a future occasion, and, we think, convert the most sceptical of the moderns to our opinion.

We are so fully impressed with the value of the ancient medical writings, that we think the Royal College of Surgeons, and the Society of Apothecaries, and the other examining bodies to which we have referred, should imitate the Royal College of Physicians, and examine in the works of Hippocrates, Dioscorides, Celsus, Aretæus, Galen, Avicenna, Harvey, Huxham, Wharton, Morton, Highmore, Willis, Sydenham, F. Home, Ritty, Heberden, and Gregory. Every British medical practitioner ought surely to be acquainted with the writings of his own countrymen, at least, of such illustrious physicians as those named from Harvey to Gregory, in the preceding sentence.

We are not advocates for throwing difficulties in the way of medical students, but we must maintain the importance of our suggestion. The plan we propose might be perspective, and might come into operation so as to affect those only who as yet have not entered on their classical studies.

In fact, this course is partly adopted already, and if further proof of its utility be required, we need only refer to what is now passing before us—the citation of the works of Sydenham, Morton, &c. on the disputed question as to the nature of cholera. It must be almost superfluous to add, that the more learned and more informed a medical man is, the more valued and respected will he be by society—the more useful to mankind, and the greater ornament to the profession to which he belongs. It will be said that students cannot find time to peruse the ancient authors, and that such works are calculated to mislead them. These objections are futile, because the elementary education of these times bears no resemblance to the theories of the ancients, while the practice of medicine is very nearly, if not entirely, the same. Neither time nor space warrant us to prosecute this theme; but we are disposed to believe we have adduced sufficient arguments in support of our conclusion. The Court of Examiners of the Apothecaries' Company intend to examine in the work of Aretæus, and it is also said will recommend the study of the French, German, and Italian languages; but why exclude the works of Harvey, Sydenham, F. Home, or Heberden? The Colleges of Surgeons of Dublin and Edinburgh require the most liberal academical education from their candidates.

MEDICAL DINNER.

ON Thursday week the Lecturers, and Pupils of the St. Thomas's Medical School held their anniversary dinner, at the London Coffee House (FREDERICK TYRRELL, Esq. in the chair) supported by J. H. Green, Esq. and B. F. Travers, Esq. After the removal of the cloth, the usual loyal toasts—"The King"—"The Queen"—"The Navy and Army"—were given and drank with enthusiasm.

The Chairman then rose to give "the Profession," and in a long and eloquent speech noticed the antiquity, the importance, and very great utility of the study of medicine, when conducted upon scientific principles. He alluded to the great improvements that had taken place of late years, both at home and abroad; and observed that the science of medicine had reached a high state of perfection in this country, conducted as it was upon the principle of truth. The toast was then given—"Success to the Profession, as conducted upon the principles of science, all over the world." This was received with great applause.

In proposing the next toast, the Chairman took occasion to observe, that to the body of the profession there was, as to other bodies, a head; or rather, in this instance, three—the Royal College of Physicians, the Royal College of Surgeons, and the Worshipful Company of Apothecaries. In connection with the first head, the Chairman alluded to the very high station it held; and concluded a long and able speech by giving "The College of Physicians," coupled with "The health of Dr. Williams." This was drunk with every mark of respect and approbation.

Dr. Williams, in a neat speech, returned thanks.

The Chairman then introduced the "College of Surgeons;" and in the most able manner spoke of what the College had done—and more—

what it was doing, to promote the interests of science. Mr. Travers, as the only member of the Council present, returned thanks, and said that the exertions of the Council would still be directed, as they had been, to further the interests of science and the profession.

"The Worshipful Company of Apothecaries," together with the "Health of Mr. Whitfield," followed, and was drunk with applause.

The Chairman gave the "Health of the venerable Dr. Babington." This was received with great applause.

The Doctor, in the most feeling manner, returned thanks, and proposed the "Health of the Chairman." Long and continued applause followed the announcement of this toast, which was drunk in the most enthusiastic manner. Mr. Tyrrell, in an eloquent speech, returned thanks.

"The healths of Mr. Green and Mr. Travers" were, in the course of the evening, given, and received with warm feelings of approbation.

The St. Thomas's School" was given from the chair; and the excellent management, and constant attention evinced by the Treasurer, A. Chapman, Esq. particularly noticed. This met with the greatest applause.

Mr. Green then rose, and after a long and most eloquent speech (to which we regret our limits will not allow us to do justice) presented the prize medal to Mr. Tomkins for the best surgical essay; and Mr. Tyrrell, on behalf of Mr. South (who, we are sorry to say, was prevented from attending in consequence of ill health), in like manner presented Mr. Shearman with a medal, for the great zeal and industry with which he had prosecuted his anatomical studies. The healths of these gentlemen were drunk, and they severally returned their acknowledgments.

"The healths of the different Lecturers, Drs. Williams, Roots, and Rigby, Dr. Ashburner, Dr. Burton, Mr. Tyrrell, and Mr. South," having been given, the pupils shewed the

way in which they appreciated their valuable instructions, by the enthusiastic manner in which they received the toasts. Dr. Roots, in a most effective and brilliant speech, returned thanks for himself and his colleagues.

"The health of the Demonstrators, Mr. Solly, Mr. Travers, jun., and Mr. Clarke," was then proposed.—This toast was received with every mark of respect and approbation. The constant attention these gentlemen had paid to the anatomical studies of the pupils merited the warmest acknowledgments of the class.

Mr. Solly ably returned thanks.

"The healths of the Stewards," whose excellent management had given the greatest satisfaction, followed. Amongst the distinguished guests present, were Drs. Babington, Quain, Elliotson, &c. &c.

The President having left the chair, about twelve o'clock, the company retired soon afterwards.

Hospital Reports.

ST. THOMAS'S HOSPITAL.

Rachialgia.—Cure by Carbonate of Iron.

JOHN MULLINGHAM, aged 36, admitted, Feb. 7, into this hospital, into Jacob's Ward, under the care of Dr. Elliotson: is of short stature, pale, and of a sickly appearance; states that about three years ago he fell down the steps leading to St. Bride's church, and was taken up senseless. Since that time he has been troubled with pain about the cervical region, sometimes extending over the whole of his back; he finds the pains increase by change of weather. After this accident he was under medical treatment for three months, and was also an out-patient of this hospital. In other respects he finds himself in good health.

He was ordered to take two drachms of the carbonate of iron three times a day.

9th. Still complains of the pain about the neck.

The carbonate of iron to be increased to half an ounce, and taken as before.

13th. The pain still continuing, although better than at last visit.

20th. Finds himself much better, the pains having entirely left him.

The medicine to be continued.

March 1st. Continues free from pain, but his countenance changed much for the worse, and has got very thin.

To take a pint of porter daily, and to be kept on a full diet.

5th. For the first time he has complained of pain about the abdomen, especially on pressure at the lower part of it. He has been attacked with diarrhoea, for which he was ordered tinct. opii, combined with infusion of catechu.

Dr. Elliotson remarked, on going round, that he was of opinion the mesentery glands were diseased.

6th. Diarrhoea stopped; has had no sleep during the night; pulse slow, and scarcely perceptible.

During this visit the patient died.

Sectio Cadavaris.

No disease could be found on opening the spine, head, or chest; but on opening of the abdomen, there was a canal of nearly six inches in length, on the right side, which was found to be formed by the adhesion of all the other parts together.

At the inferior part it formed a kind of sac, which was found filled with blood, partly coagulated and partly fluid; both the peritoneum and its layers, which form omentum, were covered with tubercles, very similar to those found in the lungs of scrofulous people. The adhesions were so extensive that the stomach, diaphragm, and liver, were all united by means of peritoneum; the mesenteric glands were also diseased, and were covered with these tubercles, which were found to be in a suppurating state: all the internal parts of these organs were healthy.

CASE 7. *Typhus*.—Henry Haywood, of spare habit, aged 26, was admitted into the hospital for syphilis, in the form of excoriation and superficial ulcers of the penis, the glands about the groin enlarged, and pain of the limbs. According to his account, he had suffered much in mind for some time; he was a teacher of languages by profession.

On Tuesday, the 14th of Feb. he was attacked with the usual symptoms of fever, which he attributed to exposure to cold after the warm bath. Before his illness there had been some cases of fever in the ward, the nurse having died of it a few days before, and another patient, who was taken ill about the same time as Haywood, had also died.

He was visited by Mr. Whitfield the morning after his illness, who ordered him twenty leeches to the temples, and cold lotions to the head, and to take five grains of calomel, to be followed in three hours by half an ounce of castor oil.

16th. To repeat the leeches, and a blister to be applied to the back of the neck, and to take three grains of calomel twice a day.

17th. Repeat the leeches; the hair ordered to be cut close.

18th. Pain continues violent in the head; the other symptoms remain the same; ordered twenty more leeches to the temples, and the head to be shaved.

On Saturday he was seen by Dr. Elliotson, and removed to Jacob's Ward the following morning, and ordered a cold lotion to the head, and to take three grains of calomel every four hours, and to keep on a fever diet.

19th. Attacked with delirium in the night; mustard poultices ordered to be placed on the abdomen and feet.

20th. In a very low state of delirium; Dr. E. ordered him nitrate of potass, gr. x. carbonate of soda, ℥j. to be taken every three hours, and an ounce of port wine every six

hours; to have a pint of strong beef tea, and a pint of milk daily.

21st. Attacked with diarrhoea in the night, for which he was ordered to take an ounce and a half of the compound chalk mixture every four hours.

On the following day Dr. Roots saw him, and ordered him to take of tinct. opii. in an ounce of wine.

At six o'clock, continuing the same, he was ordered gr. 3. more of the tinct. opii.

Nine o'clock: His bowels being confined, an enema was ordered to be given immediately, and a blister to be applied to the neck.

24th. Very restless; could scarcely be kept in bed, and in this he continued until Friday morning, about eleven o'clock, when he died.

Secitio cadaveris.—There was no ulceration apparent in the intestines; the mucous membrane appeared in some parts, especially in the lower parts of the illium, much congested. Effusion had taken place under the pia mater, and into the ventricles of the brain.

TREATMENT OF CHOLERA BY GALVANISM.

GENTLEMEN,

HAVING met with another extreme case of the peculiar epidemic which is now prevailing, I send you the following particulars for insertion in your valuable Journal, should you deem them sufficiently interesting.

Thomas Skowes, aged 25, a seaman on board of the *Evander*, from Aberdeen, seized about eight o'clock on Sunday morning, with vomiting, speedily followed by violent purging, and severe spasms of the abdomen and extremities. As the disease increased, he took about a gill of brandy, which he almost immediately ejected.

Spasms becoming stronger, purging and sickness more urgent, medical assistance was requested.

At three o'clock, accompanied by my brother and apprentice, I went on board the *Evander*, *Hermitage Tier*, and found the patient lying on the floor of the fore-castle, suffering severely from spasm. On the admission of a sufficient degree of light, the similarity which he bore to the mate of the *Felicity* was at once discovered.

Although he was in a state of great exhaustion, it was necessary to get him carried, after giving him tinct. opii. gtt. xxx. liq. ammon. carb. spirits æther sulph. aaa m.x.l. in a little brandy and hot water, to the cabin, where there was a good fire, and more room for using the means about to be employed. A bed was made upon the floor, and, with as little fatigue as possible, he was undressed, and wrapped up in blankets. At this time he presented the following appearance:—the face livid, features collapsed, eyes sunken, arms, hands, legs, and feet, blue; fingers very dark, and their skin corrugated; nails perfectly blue, and resembling a dark grape when nearly ripe; the penis and scrotum were also remarkably discoloured.

The tongue was whitish and moist, but neither it nor the breath particularly cold; the hands, feet, arms, legs, and different parts of the body, felt cold, clammy, and moist; pulsation at the wrists and temples was totally imperceptible; at the carotid, and heart extremely feeble.

After dispatching a messenger to the cholera ship, the *Dover*, and sending ashore for some mutual friends, to give them an opportunity of witnessing the case, the following treatment was employed:—In addition to the wrapping him in blankets, frictions were vigorously carried on; bottles of hot water applied to the feet, placed in each axilla, and rubbed over the chest, spine, and abdomen. Mustard, spread on towels, was laid over the anterior surface of the body, from the clavicles to within a short distance of the pubes, and placed in contact with the back,

from the nape of the neck to the sacrum. As he was threatened with a return of the spasms, another dose of laudanum was administered; and about four ounces of blood were abstracted.

By these means he seemed in some degree to improve; the dark colour decreased, the lips somewhat resumed their natural hue, and, by degrees, the fingers and nails assumed a whitish, withered, bleached appearance.

Whilst the disease was in this stage, Mr. Holman, surgeon, and Mr. Powell, a young medical gentleman, arrived, and very kindly rendered their assistance.

Frequent small quantities of brandy and hot water, with a few drops of æther and ammonia, were given, and about two ounces more of blood obtained. The blood was very dark, and resembled thin treacle.

About five or half past five o'clock the surgeon of the Dover came on board, and as no marked symptoms of re-action had taken place, he concurred in the opinion that recourse should be had to the use of mustard as an emetic. After two table spoonful had at different times been given in about a pint and a half of warm water, vomiting commenced, but not very copiously. As the chief indication was to produce re-action, with the sanction of the gentlemen present, I sent for a galvanic apparatus, and laying a piece of tin-foil, moistened with salt and water, over the lower part of the spinal column, and another on the nape of the neck, they were connected by means of the wires from each end of the battery, and communicated the galvanic influence so effectually, as to produce strong muscular contraction, and to reproduce distinct pulsation at the temples and at the wrists; but in proportion as he became more sensible to the galvanic stimuli, he got so determined not to allow its further use, that we were compelled with great regret, and although fully satisfied of the beneficial effects of the agent

employed, to abandon it, and at the same time almost all hope of his recovery.

We then left him under the care of my apprentice, who remained with him all night; administered an emetic, composed of brandy and hot water, and prevailed upon him with considerable difficulty, as the purging returned, to take *ol. ricini* two tea-spoonsful; *pil hydrarg.*; *gr. v. pil. opii grss.* and a similar dose at the expiration of two hours. He also got him persuaded to take a table-spoonful every alternate hour, of the following mixture: *ol. rutæ grtt. xv. sp. æther sulph. grtt. xxx. tinct. fœtid 3i mit camphoræ; aq. menth. pip. aa. 3ij.*

About five o'clock he seemed somewhat better, and is reported to have passed a little urine with a dejection, which he then had. His amendment however was but of short duration, for he sank so completely, and became so very blue, that believing him to be dying, the captain came on shore for me about eight o'clock, accompanied by Mr. Stolman, Mr. Powell, and my brother; I repaired on board, and again found him seemingly in articulo mortis. Although we entertained not a hope of his recovery, the galvanism was again employed; it roused him in a slight degree; but as the muscular contractions were less powerful, and not the slightest symptoms of re-action was apparent, at the end of about ten minutes it was relinquished.

He died quietly at ten o'clock.

On our last visit, both my brother and myself saw in a moment, the strong, the marked resemblance, which the man bore to the mate of the *Felicity*, when I first saw him on the night of the 6th ultimo. All present felt the coldness of his tongue and of his breath, the morning of his death; and not all the Boards on earth will ever convince me, or my brother, that Daniel Barber's case was not one of the peculiar disease which is now prevailing.

I have had two patients, since Bar-

ber's case, with congestive fever, preceded by vomiting and purging, but as they did not exhibit symptoms, which could have warranted me to have pronounced them cholera, and as they occurred prior to the notice to report diseases in *any wise* resembling cholera, "I did not consider the treatment I had previously received, deem it necessary to trouble the Board. My patients speedily recovered.

Not the slightest proof of contagion can be advanced on this occasion, or on any which I have witnessed, but as it is acknowledged that several cases have occurred in the same tier, might it not be traced to the custom which exists of allowing vessels to be there loaded with highly offensive manure?

I am Sir,

Your most obedient servant,

ROBERT BOWIE.

44, Burr-street,
March, 7, 1832.

The Evander had a considerable quantity on board, so also had another vessel, from which the captain was brought ashore, and who was said to be labouring under the same disease.

[Mr. Thackrah, of Leeds, has published an account of cases of cholera; the first of which occurred in 1822, and the rest from that period to 1829, which presented every symptom of the cholera now prevailing, and which, when read from a manuscript at the Westminster Society on Saturday, were admitted by the contagionists to be the malignant epidemic, (see our report of the proceedings of the society). Dr. Johnson explained the time of their occurrence, and excited general laughter. Here is ample proof of the correctness of our opinion, that the disease is not Asiatic nor contagious, but an aggravated form of English cholera. Eds.]

THE ANATOMICAL FIGURE AT
KING'S COLLEGE.

To the Editors of the London Medical and
Surgical Journal.

GENTLEMEN,

If you have not too great press of matter for your next Number, will you oblige me by inserting this in your invaluable Journal; indeed, the respect, or I may say love, we all entertain for his present Majesty, will, I trust, prove a sufficient cause for your complying with my request. It is well known that his Majesty was pleased to present to King's College the celebrated model of Dr. Auzoux, the most splendid model ever executed, and presented by the highest personage of the realm; yet, believe me, Sir, (and I blush to say it) the students of that College have *not thanked* his Majesty for it. They ought to have appointed a night on which they might have met in one of the theatres, and have got up an address of thanks to his Majesty, which, doubtless, Sir Henry Halford would have been pleased to present. It is not, however, to say what ought to have been done, but what remains for them to do; and I most sincerely trust *this* will have the effect of rousing the *dormant politeness* of those young gentlemen; let them instantly get up this address, and on the same evening take into consideration the propriety of holding their annual dinner (supposing them to have their annual dinners as all other schools), when his Majesty's name might be mentioned in such a way as to make up for the great backwardness they evinced. What must the other schools think of them?

Your obedient Servant,

IOTA.

March 19th, 1832.

NOTICES TO CORRESPONDENTS.

COMMUNICATIONS have been received from Dr. Hood, of Brighton; Dr. Horsley, of North Shields; Dr. Gordon Smith; A. J. D.; A. Georgian; Dr. Tuthill; A. B.; Mr. Shel-drake; Dr. Titley; Dr. Morris; Dr. King; Mr. Small; a Student at the Middlesex, and a Student at the Westminster Hospital.

Errata.—In consequence of the increased difficulties of a weekly publication, some errata have appeared in this Journal, and such are almost inevitable; but as we have occasion to reprint the whole of the numbers, all will be corrected. Our correspondents should bear in mind that many scientific terms are unknown to printers, who, in making corrections, are as liable to make new blunders as in the first instance. Add to this the fact, that not one medical manuscript in fifty can be decyphered by them, or even by well-educated members of the profession, to whom we, of necessity, commit the revision of the press. We have already hinted this to our correspondents, and we would further say, with Cobbett, that writers should recollect somebody is to peruse their productions. Some complain of the style and composition of certain lectures we publish, but these are the lecturer's fault, not our reporter's. Those who object in this way ought not to forget, that teachers must make themselves perfectly understood to their inexperienced and uninformed hearers. Besides, those lecturers who are actively engaged in practice, and who deliver their instructions extemporaneously, can have little time to attend to euphonious sentences and the beauties of literary composition.

E. D.—It is almost impossible to procure accurate hospital reports, as the cases are not taken down in most of the hospitals; and the physicians and surgeons have been so much assailed in other journals, that they oppose reporting. In some hospitals the case-books are carefully looked up, lest the students should copy them; and in all there is the most culpable neglect of clinical medicine and surgery. Many of the medical officers feel grieved at the publication of unfavourable cases; so that the industrious student pays his money for nothing but to follow the disinterested regulations of the Court of Examiners of the Royal College of Surgeons, every one of which body is an hospital surgeon, and, of course, has a share of the loaves and fishes.

In our last we explained the disinterestedness of the Worshipful Company of Apothecaries, with respect to attendance on the physician's practice of an hospital, where alone pure unadulterated medical knowledge is to be gained for the moderate charge of 20 guineas; though more information can be derived from dispensary attendance for £5. We are unconnected with hospitals or dispensaries at present, and can speak impartially.

Dr. Hood's valuable Essay on the Pathology of Cholera, is in type, and will appear in our next.

Dr. Titley's valuable communication in our next.

Dr. Horsley's graphic and excellent communication in our next.

Dr. Gordon Smith's suggestions will be attended to, and we feel obliged for them.

A. J. D. assures us that the formula ascribed to Lugol, ex. gr. iodine ʒj. hydrod. pot. ʒij. aq. ʒvij, is not correct; the last should be ʒvij. It certainly struck us, at the time we reviewed the work, there was an error, but on referring to Dr. O'Shaughnessy's translation, it was so printed in that work. If another made a much slighter blunder, he would be impaled in the *Lancet*. We called at Balliere's, but could not procure the original. We feel much obliged to our correspondent, who resides in the country, for the trouble he has taken in correcting such a serious error.

A. Georgian.—We shall be happy to hear from our correspondent.

Dr. Tuthill's request is complied with.

Mr. Shel-drake.—The force of the essay is diminished by recent events. The communication, though valuable, is too long for our pages.

A donation of £1. from A. B. for the distressed family in Christchurch parish, has been received, and sent to Mr. Forbes Winslow, agreeably to the humane writer's request.

The Clinical Remarks by Dr. Seymour and Mr. Brodie, at George's Hospital, in our next.

A Brick of the Old Hospital (St. George's.)—The ludicrous sketch of the medical school, and medical and surgical practice of St. George's Hospital, described by our worthy and valuable friend, is so instructive, and so strongly illustrative of the present system of medical instruction, that we shall give it a place in our next.

A. B. C.—We assure our friend, and our readers in general, that the price of this Journal will not be raised at any future time, as our circulation has been unprecedented. Our early numbers are now being reprinted, and the hourly demands for our labours increase so rapidly, as to enable us to offer the varied and valuable contents of our periodical on the terms with which we started.

"One of the Incommoded," at Bartholomew's, will have our support in our next.

The Address to the Medical Profession, and to the Public, generally, reached us after our last sheet was prepared for the press.

Errata.—In Mr. Earle's Lecture, p. 159, 2 col. 2 par. comma after "affected." 3 par. "effect," read affect; "though urinary," the urinary.

P. 160—"Bonnetter," read Bonet; "uterus," ureters; "Bamen," Barnes; "pelvis," penis; "Litris," Litre's.

London Medical and Surgical Journal.

No. 9.

SATURDAY, MARCH 31, 1832.

VOL. I.

Royal College of Surgeons.

LECTURES

ON THE

ANATOMY AND DISEASES OF THE EYE.

DELIVERED BY

G. J. GUTHRIE, Esq., F.R.S., V.P.R.C.S.

Lecture the Eighth.

MR. PRESIDENT,

IN my last lecture I described the progress of inflammation from within outwards; and I stated that the disease ran its course in a very short time, to the destruction, or at least severe injury, of the eye; and I also remarked, that our measures must be very vigorous, in order to make any impression on it. We shall proceed now, sir, to another disease, which proceeds from without inwards, and which proves destructive to the eye nearly as rapidly. I allude to the whole class of purulent inflammations: the common purulent inflammation of the adult, the gonorrhœal, and the purulent affection of children, which is analogous to both.

The first I shall notice is the *common purulent inflammation of adults*. It affects, in the first place, the conjunctiva only of the eye; it is not, however, simple inflammation, for it possesses characters different from those which usually attend common inflammation of those parts, so that if it is not a specific inflammation, there is something peculiar in its nature. It may occur as a spontaneous or sporadic disease, the person affected having had no communication with any other person suffering in a similar manner; and it may occur among numbers aggregated together, having some persons with them suffering from the disease. This supports the belief, that the disease is contagious in its nature. I shall not occupy your time in relating cases in which the matter conveyed from one individual to another has produced the disease,

but I shall lay it down as a principle, that the disease is contagious, that is to say, communicable by contact. In regard to infection by the atmosphere, it is more difficult to prove that it does not take place than that it does; I believe that this propagation by infection may occur under certain circumstances, by aggregation of persons. When the disease gets into a work-house, or among troops, the only means to prevent its spreading, and to eradicate it, are cleanliness, distinct separation and occupation; no person who has this disease should be shut up with others; the whole should be encamped in the open air, and exposed to the free current of the atmosphere. When troops are affected, they should be kept employed by drill or otherwise, for men prefer being in hospital, with a moderate degree of illness, to doing their duty. When this disease is commencing, the patients complain of uneasiness in the eye, and an itchiness, which soon changes to a feeling as if sand was in the eye; the eye appears suffused, that is, it is reddened and glistening, and there is an increase of the secretion—not the common tear, or the ordinary secretion of the conjunctiva, but a secretion of a puriform character, lying on the folds of the conjunctiva. The upper eye-lid now begins to swell, and becomes remarkable from the appearance it gives the eye. If we allow the disease to proceed uninterruptedly for twelve hours, the lids become so greatly tumified that they can scarcely be separated, and it is difficult to see the eye; if the eyelids are forced open, which can only be done by an experienced hand, we perceive that the state I described to you on Tuesday has already taken place. Chemosis has formed, the conjunctiva is separated from the sclerótica by a fluid effused beneath, and a cup is formed around the cornea; there is likewise a great purulent discharge, which pours out on separating the eyelids. The disease exists in the extreme vessels of the conjunctiva; it is seldom caused by cold, and more generally arises from the application of some irritating or contagious matter.

The inflammation is very prone to go inwards, and produce symptoms similar to those I described in my last lecture. The pain changes from the sandy feel previously complained of, and is felt in the eye-brows, forehead, cheek, and side of the nose; vision is more or less defective, because the cornea is muddy, and vision is likewise obstructed, in consequence of the fluid collecting in the cup formed by the chemosed conjunctiva.

The progress of the complaint is more or less rapid in different individuals, it is very different in different circumstances; it may run its course in three, four, or five days, by causing ulceration, sloughing, or rupture of the cornea; at other times, the disease may merely affect the eye-lids, and very slightly the eye-ball, in which case, it may continue for three or four weeks, and then end in ulceration of the cornea, which does not prove totally destructive of vision. There are other degrees of inflammation between these two, which may cause rupture of the cornea, and yet vision may be partially restored. I shall content myself with describing the two extremes,—that which proceeds very rapidly, and that which is as proportionally slow.

Both diseases prevail epidemically, and are met with in the same places, or regiments at the same time; several persons may be affected with the more rapidly fatal disease, while others, residing next them, may have the milder form; the only difference is, that the inflammation reaches the ball more quickly in the one instance than in the other; and that one is more amenable to treatment than the other. I mention this to reconcile the discordant opinions of different writers on this subject, many of whom never saw the disease.

If left to itself, it is seldom cured, but rather goes on to ulceration, sloughing, or rupture of the cornea. The lids thicken, become everted, and the appearance is deplorable. I shall not detain you further with the symptoms of this disease, but proceed at once to the most important part—the treatment. When it affects a great number of persons, complete separation, and constant exposure to the atmosphere, must be put in practice, or nothing will be done. It was supposed that this was an inflammation affecting the whole of the eye, which it may be, but it differs, at first, from the common idiopathic inflammation, by commencing externally, and proceeding inwards; it is not so rapid in its progress, nor does it exhibit similar symptoms, until it affects the internal parts. From its being supposed to be an internal inflammation, it was deemed necessary to abstract blood in large quantities; indeed, 60, 80, and even 100 ounces have been drawn. It was often thought necessary to bleach the eye and blanch the countenance, to effect a cure, and I have no doubt that it has been done with success;

and the extreme vessels of the conjunctiva have been so drained, as to be rendered incapable of going on with their secretion. Those who find fault with this practice, in all probability, never saw the disease; for it is the most efficient mode of proceeding, and the best when there are no local means employed. Since I have relied more on local means, I rarely take more than 24 ounces at a time; and bleeding should always be practised, because it is requisite to subdue or alleviate the general fever, which is caused by the extreme local irritation that takes place, but not more than 18 or 24 ounces need be taken for this purpose. Tartar-emetic was greatly extolled, at one time, as a powerful agent in treating this affection, but I have already told you that tartar-emetic is of little or no use; if it excites much vomiting, it will do more harm than good, by straining the eye, and may give rise to rupture of the cornea, especially if it be at all softened; and small or nauseating doses can do little or nothing in time to prevent mischief in the more serious forms of the disease.

Various applications have been made to the eye. Emollients are injurious; hot water may be useful, inasmuch as it removes the discharge, and if opium is dissolved in it, will serve to allay the pain in some measure. Poultices are exceedingly hurtful, as they tend to increase the discharge, and consequently keep up the disease; cold poultices have been applied, but in half an hour they become hot, and then they are as bad as if they were applied hot; great attention would be necessary to keep the poultices constantly cold, and even then little or no advantage would be obtained from their application. Lotions can only be of service when they wash away the discharge, and prevent its irritating the parts by its quantity. Blisters are of use only when the disease is on the decline, and to prevent a relapse. The liquor plumbi subacetatis has been recommended to be dropped into the eye undiluted; and, as an astringent and stimulant, I believe it would prove of service, for it is my opinion that all these purulent diseases are to be cured by astringents, stimulants, and sedatives. A slave-ship was crossing the Atlantic, and, at a particular part, the negroes were attacked by this disease; that it was owing to the constitution of the atmosphere appears certain, for they met a Portuguese vessel, coming from a different part of the world, having its crew suffering from the same complaint. Many of the slaves lost one, and many of them both eyes, so that several of them threw themselves into the sea, or were thrown into it to prevent their overpowering the Europeans; the whole tale is, indeed, one of dark mystery and distress. When this vessel arrived in the West Indies, the old negroes cured many of these poor people very rapidly, by squeezing lemon-juice into the eyes, instead of employing

emollients and poultices. Now, lemon-juice, you know, is a powerful stimulus. When the army was in France, in 1815, there were several regiments affected by this disease, and many men lost their eyes. Dr. Ridgway, assistant-surgeon to the 95th, or as it is now called the rifle regiment, recommended a solution of nitrate of silver, of from 4, to 6, 10, and even 12 grains to the ounce of distilled water, to be dropped in the eye, and this did more good than any thing else. In the course of practice, however, I found this to be yet inefficient, although, at first, it seemed to do good. The effect produced by the application of the solution soon goes off; when it is dropped in the eye, it turns white, the nitrate of silver is decomposed, and becomes a muriate; it coagulates the discharge, and renders it easier to be washed off. The effect is far from being permanent. The advantages of the stimulant practice I discovered in crossing the Atlantic in 1801. In the middle of the passage, inflammation of the eyes, with chemosis and great purulent discharge attacked the men; about 100 were seized with it. The salts and calomel were soon exhausted, indeed they hardly went twice round; and as to bleeding 100 men once or twice a day, it was totally out of the question; I could not do it. I had nothing left to give them but the sea-water, and every fellow had a pint to drink three times a day, and washed his eyes well with it besides. At that time I knew very little, or nothing, about the diseases of the eye, but had fortunately read in a book, by Mr. Ware, that the *vinum opii* was a good application. Now the only preparation of opium I had on board was the strong tincture, and only a pint of that, so that I was forced to be careful of it. I applied this to their eyes by drops, and it made them jump up to the ceiling, or deck; but it did them so much good that there was no need of calling them for a second drop in the afternoon; they came of themselves and asked for it, saying, that although it smarted them very much, it had done them a great deal of good; and such benefit did they receive from this drop, that not a single eye was lost, although the disease went through the whole regiment and remained with it for some time. In the more formidable affection, which runs its course in three or four days, neither the nitrate of silver in solution, nor the *vinum opii*, are effective; it requires a more powerful local application. The disease begins externally, and is a local disease of a peculiar character. If we can set up a new action, or alter that which is going on, we check the original affection, according to the principle of John Hunter, that no two diseases or actions go on at one and the same time. Acting on this principle, I took the nitrate of silver in substance, and made it into an ointment. I did not arrive at its exact composition at once, but gradually acquired it, by degrees; it was

made at various times of five, six, ten, and twenty grains to the drachm, and after trying all these different preparations, I came to the conclusion that the ten-grain ointment was the best. Take half a drachm of the salt and powder it in a glass mortar, then sift it through a bit of muslin, so that it is reduced to an impalpable powder, for if there are any grains left they will stick in the cornea, or in the folds of the conjunctiva, and produce a slough. Ten grains of this impalpable powder should then be thoroughly incorporated with a drachm of hog's lard, on a glass slab, with an ivory paper-cutter; and in order to ensure proper attention in the preparation of this ointment, I sought for something to mix with it, which would require some time for its incorporation, and selected the liquor plumbi acetatis for this purpose. Fifteen drops are to be duly mixed with the ointment; and as it generally requires some minutes to do this, there is reason to believe that the trituration is complete. There has been, as usual, some disputes concerning this ointment; the first thing said was, that it was violent and useless: well, that has been got over. The second stage was to attribute the introduction of it to some other person. The third, to alter the composition, and instead of the liquor plumbi acetatis, to mix opium, &c. with it. I have no objection to this, if the gentlemen will only leave me the principle, which is all I contend for. I care not if they change all the component parts, or whether they apply it by a brush, the little finger, or the probe. It has been said, that it is soon valueless and inert: all I can say is, let those who think so have it applied to their eyes, and they will soon change their opinion, even if it be a year old.

Before the ointment is applied in this purulent inflammation, the discharge must be well cleansed out by a solution of alum; then, the ointment having been inserted, the lids must be moved freely up and down, so that the whole conjunctiva gets its due proportion of ointment, and this is shown by its turning white. If it does not turn white, it has not been sufficiently applied, and will not answer the purpose; if we wish to be quite sure, we turn out the eyelids, and rub the ointment on them; this application gives pain, which lasts from half an hour to an hour, or more; it is not quite so acute as the *vinum opii*. I had rather that the pain should last an hour or more, as the action going on is more likely to be changed. When I apply this ointment, I generally direct the patient to lose blood, not to the amount of 60 ounces, but to about 20, and I had rather that he should faint; and I do this because the application will only alter the action in the extreme vessels, and not that which is behind them in the ball itself, and it is therefore necessary to diminish action in them by bleeding. If, however, the inflammation is moderate, I do not bleed at the time, leaving

directions that if the patient is not better in the evening, or the next morning, that blood should then be taken. Warm narcotic fomentations may be employed to relieve uneasiness, and opium should be given to allay pain and obtain sleep, while a solution of alum, ʒss to the half-pint, should be injected from time to time into the eye to clear it; but should the patient sleep he must not be disturbed. A mild ointment may be applied to the lids at night, to prevent their adhering together. The next morning, the discharge is again to be removed, and the ointment re-applied, for on no account should the action we are desirous of exciting be suffered to cease; the other remedies are likewise to be continued. In addition to these, I would give calomel and opium, so as to affect the mouth, and the other more common remedies, and rest and diet should be attended to. When I hear of twenty or thirty persons losing their eyes from this disease, I say that it must always be so, unless they are treated on this principle, bearing in mind, that some diseases, in certain persons, are incurable from the first, and that no one means of cure is applicable to every case. I am certain, however, from experience, that the plan I have recommended is the most generally efficient and certain of any that has hitherto been advised, whilst it is also less injurious to the constitution.

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,

During the Session of 1831-32;

BY BARON DUPUYTREN,
PRINCIPAL SURGEON OF THAT HOSPITAL.

Permanent Retraction of the Fingers.

THE retraction of the fingers, and above all of the annular one, was, to our epoch, little known in its cause. When we pass in review the multitude of causes to which it was attributed, the quantity of remedies employed against it, the hypotheses, more or less numerous, on its origin, it is not at all surprising that it was believed to be incurable. The authors who have treated of the subject have left it incomplete. M. Boyer, in his *Treatise on Surgical Diseases*, has designated it *chrispatura tendinum*; but he says only a few words upon it. Perhaps, says M. Dupuytren, in making researches, we shall find some descriptions in authors; but my life being entirely devoted to practice, does not permit me to do all, and I shall be happy to learn

that those who have preceded me, and who have written on this disease, have discovered the cause, and the means for its cure.

It has been made successively to depend upon a rheumatismal, a gouty affection, external violence, fracture; on a morbid cause, induced by metastasis, such as follows inflammation of the sheaths of tendons, tendons of the flexors, or on a species of ankylosis. We now know that many of these causes are ill founded.

Most of the individuals affected with this disease, have been obliged to make efforts with the palm of the hand, and to handle hard bodies.

The wine-merchant and the coachman, whose cases we will report, had the habit, one to pierce large barrels with a piercer—the other to exert incessantly his whip on the backs of his jaded horses. We can also cite the example of a man accustomed to the labours of the cabinet, who bestowed especial care in sealing his despatches. We meet with masons who seize stones with the extremities of the fingers, with cultivators, &c. It is seen then, finally, that the disease manifests itself in preference with those who are obliged to make the palm of the hand a point of support (*point d'appui*.)

The individuals predisposed to this affection are observed to extend the fingers of the diseased hand less easily; the annular, or ring-finger, is retracted slowly; the alteration begins on the first phalanx, and the others soon follow the movement, so that as the disease advances, the ring-finger becomes more and more bent. It is at this time that the flexion of the next two fingers are effected in a marked manner. At this period of the disease there is no nodosity of the cord on the palmar aspect of the annular finger; the last two phalanges are straight and moveable. The first is flexed at an angle, more or less right; it is moveable on the metacarpus. In this state it cannot be rectified without the most violent efforts. A person affected with this disease has, in the attempt to cure it, raised successively several pounds, as many as 150. The enormity of this weight did not cause the cessation of the flexion.

When the ring-finger is flexed to a high degree, the skin presents folds, of which the concavity regards the finger, and the convexity the radio-carpiar articulation. These folds are the result of the natural adhesions of the skin with the altered parts. At first one would suppose the skin is diseased; but dissection proves that the cutaneous envelope is estranged from the affection. If one touches the palm or face of the ring-finger, he feels a tense cord. The summit of this cord is directed towards the first phalanx, and we can follow it towards the superior extremity of the palm of the hand. On flexing the finger it almost entirely disappears. When we make efforts to extend the fingers, we put the small palmar tendon in

motion, and this motion is propagated with superior palmar aponeurosis. The continuity of these two parts gives the explanation of this simultaneous action. We shall comprehend that there is in this part something to fix our attention.

But to what do we attribute the increase of this disease? The ring-finger cannot be more extended—the vicinal ones not completely. The patient cannot seize bodies but such as are less voluminous; if he wishes to grasp them tightly, he experiences acute pain, and the action of seizing is constrained, and determines a painful sensation. If he remains quiet the pain ceases, and he will not again experience it until he forcibly extends the fingers.

M. Dupuytren, who, in his clinic or in his consultations, has observed thirty or forty cases of this disease, cited a host of opinions as to the cause of annular retraction. Some have considered it as a thickening and induration of the skin, and did not consider it accumulated on itself, because it followed the movement of the cause which had produced the disease; others made it depend upon a spasmodic affection of the muscles; but this explanation is purely hypothetical, for, with the exception of extension, all the other movements are executed freely and easily. The greatest number have thought it to depend upon disease of the flexor tendons, and M. D. was of this opinion for a long time; but he did not know the nature of this disease. Is it an inflammation, a congestion, or an adhesion of the cellular tissue, or a chronic disease of those parts? Inflexible dissection has proved that none of these presumed changes exists. Some physicians supposed that a disease of the tendinous coverings took place; others, a certain disposition of the articular surfaces of the fingers and lateral ligaments. If we examine the articulation, we find the surfaces very much extended, and so arranged as to affect flexion, more especially, when the movements of extension are less easy.

Such was the state of science when a man died with the disease. M. Dupuytren was informed of the event, and was determined that this remarkable disease should not remain unknown. The arm was given to him, and he made a careful dissection. The skin having been removed from the whole extent of the palm of the hand, and the palmar face of the fingers, the fold or the puckering entirely disappeared; it was therefore very evident that the arrangement which presented during the disease did not depend on this cause, but was communicated to it; but how and by what? The dissection was continued; the professor discovered the palm, or aponeurosis, extended, retracted, diminished in length, its inferior part divided into cords which pass themselves on the sides of the affected finger. In extending the finger he observed that the aponeurosis underwent

a kind of tension, of crispation—this was a ray of light; so he considered the aponeurosis was something in the effects of the disease. He cut the prolongations on the sides of the fingers, immediately the contraction ceased, the fingers returned to a state of demi-flexion, and by slight force, to complete extension. The tendons were natural—the sheaths were not open—the articulations, ligaments, synovial membranes, and bones were in their normal, or natural state. It is, therefore, natural to conclude, that retraction is caused by an exaggerated tension of the palmar aponeurosis, and that this is caused by a contusion of the aponeurosis, by the strong and prolonged action of hard bodies in the palm of the hand. It will be easy to apply this theory to new facts.

The different opinions as to the cause of this affection have led to much uncertainty in the therapeutic means. Many thought it beyond the power of art. M. Bernali consulted Sir Astley Cooper for an Italian named Tersori, who laboured under this deformity, and the celebrated English surgeon held that the disease was incurable. Others admitted the possibility of cure presented, most of which were useless. M. Dupuytren has treated many such cases by fumigations, emollients, and calmans; by cataplasms at night; leeches, resolvent and mercurial frictions, with calomel, alkaline, (*douches*) simple sulphurous and other baths of all temperatures, without success crowning his efforts. He was tired of these means, and advised forcible extension by means of a machine, constructed by Lacroix; but this produced so much pain that it was necessary to abandon it. Some surgeons have proposed section of the flexor tendons, which has been practised twice. In one case, the middle tendon was divided—inflammation followed, and the man's life was in danger, and the finger remained flexed. No accident followed the second operation, but the finger remained flexed. M. D. has at length succeeded by simply dividing the bands of the palmar aponeurosis. "*Par le simple debridement de l'aponeurose palmaire.*"

A wine-merchant, in 1811, in assisting his workmen in removing casks, experienced slight pain in the palm of his hand, which disappeared in a few days. The accident was almost forgotten, when he perceived a retraction of the ring-finger and an inability to move it with the other fingers. As no pain was experienced he neglected this deformity, though it gradually increased every year. About the commencement of 1831, the ring and little fingers were flexed, and laid on the palm of the hand; the second phalanx was bent on the first, and the extremity of the third was applied to the cubital side of the palmar surface. The little finger was permanently inclined to the palm of the hand; the skin of the latter was puckered.

He consulted many medical men, and all

considered the disease to be in the flexor tendons of the affected fingers, and that a section was the only remedy. Some advised the section of both at once, others thought the operation ought to be performed on each successively. M. Mailly was consulted, and agreed that the tendons were affected, but advised the patient to consult M. Dupuytren. This professor gave it as his opinion, that the deformity was not seated in the tendons, but in the palmar fascia only, and that certain bands existed, which, when divided by a section, would restore the fingers to their ordinary movements. The operation was performed June 12, in the presence of MM. Mailly and Marc, in the following manner:

The hand being firmly held, he commenced by making a transverse incision, ten lines in length, opposite the metacarpo-phalangean articulation of the annular finger; the bistoury divided the skin, and the palmar aponeurosis, with a crackling noise, sensible to the ear. The incision being performed, the ring-finger straightened itself, and was as easily extended as in the natural state. Wishing to avoid the infliction of pain, M. Dupuytren prolonged the section of the aponeurosis, by gliding the bistoury, transversely and deeply, under the skin, on the cubital side of the hand, to accomplish the disengagement of the little finger, but this was in vain. He was obliged to dilate the incision of the aponeurosis, and made another transverse incision opposite the articulation of the first and second phalanges of the little finger, and thus detached its extremity from the palm of the hand, but the rest of the finger remained permanently fixed towards this part. Another incision was therefore necessary opposite the corresponding metacarpo-phalangean articulation, which, when accomplished, was incomplete. Finally, a third incision was practised across, opposite the middle of the first phalanx, and then the little finger was extended with the greatest facility, and announced that this last division affected the aponeurotic digitation. Very little blood was lost by these incisions. Dry charpie was applied, and the ring and little fingers were extended, and then fixed by a machine, placed over the back of the hand. On the 13th, the back of the hand was swollen by the pressure of the machine; and on the 14th, the tumefaction was general. The apparatus of M. Lacroix was now employed; the hand was still extended, and immersed in cold water and the extract of saturn. Under the influence of frequent ablutions of this lotion, the pain and tension diminished, and the condition of the patient became more supportable.

On the 15th the charpie was removed, and suppuration was commencing, but the swelling and pain continued. On the 16th there was but little swelling, and suppuration was established. Cicatrization gradually advanced, and was finished July 2. The machine was worn until the 2nd of August,

when it was removed at night, and, finally, the fingers regained their natural condition.

On Dec. 5, 1831, M. Dupuytren performed a similar operation on a coachman, aged 40 years. The disease had existed for many years; the fingers were retracted, especially the annular one, so that when he came into the clinic he could not remove them more than an inch from the palm of the hand. The skin of the palm was wrinkled, or puckered, and its concavity looked towards the fingers. Both hands were affected, and on attempting to extend the fingers, there was a cord felt running from the finger to the palm.

The patient being seated, M. D. extended the fingers as much as possible, and then made semicircular incisions, one at the base of the ring finger, and then divided the two prolongations, digital and lateral, of the palmar aponeurosis which restored this finger; the other an inch and a quarter below:

The first in the palm of the hand, in order to make a second section of the digital prolongation, and to separate it by its base from the body of the palmar aponeurosis. These incisions having been made, the ring finger regained its natural situation; and a very small quantity was lost. As the man was feeble the operation on the left hand was deferred to a future day.

The same treatment was employed as in the case of the wine merchant, and with success. Three cases are not sufficient to establish a doctrine, but they are enough to direct the attention of surgeons to this point. All cases, says M. Dupuytren, are not alike, and therefore the incisions may not be equally successful, and may be depreciated and dishonoured by false applications as in digital retractions, from rheumatism, gout, and whitlow.

MR. MORGAN'S LECTURES

ON

SURGERY.

Session 1831-2.

WOUNDS OF THE CHEST.

IN wounds of the chest, death may occur from two causes, hæmorrhage or injury to the lungs. The symptoms are expectoration of florid frothy blood, which generally also proceeds from the wound, distressing dyspnoea, anxiety in the extreme, and faintness. If blood be poured into the chest, there is extreme pain in scrobiculus cordis, and a great feeling of tightness across the chest. The lungs sometimes protrude, but may easily be returned by pressure. There is very great danger in removing any portion of the lungs, and this ought never to be done. Sometimes, on

looking through the wound, the thorax appears empty from the collapse of the lungs; this however is not a bad symptom. The treatment consists in very active bleeding, to any amount, till the symptoms be removed or relieved. The patient should not be moved till he has been freely bled and the wound closed, and then with the utmost caution, the patient not making the least exertion. Sometimes the pulse appears to contra-indicate bleeding, being very feeble and quick, but it must never be omitted. If syncope be produced so much the better; medicine, such as digitalis, &c., cupping and leeches may be used after the urgent symptoms have been removed by bleeding. If after ten days the symptoms be relieved, the prognosis is favourable. Sometimes, more particularly when the external wound is small, *emphysema* occurs, and may, by its extent, occasion tightness across the chest, coldness of the extremities, and even death. This is always the result of negligence on the part of the medical man, as this affection may always be relieved by making many small punctures. The signs of *emphysema* are swelling without redness over the body, particularly where cellular membrane abounds, and a feeling of crackling when touched.

Wounds of the heart are generally though not necessarily fatal. Instances have occurred where the patient has survived with a bullet, stylet, &c. lodged in the heart.

Wounds of arteries.—The outer coat of an artery is white, dense, and elastic; the middle is muscular and elastic, easily torn by longitudinal extension, but capable of bearing great distension transversely. The inner coat on the other hand is easily torn by lateral distension, but will bear considerable longitudinal extension. When inflamed, adhesive matter is poured out. The artery is generally surrounded by its proper sheath; sometimes this is formed by a membrane, as in the abdomen, where it is only covered by peritoneum. The arteries are never entirely relaxed. Their longitudinal extension always continues; their transverse depends upon the quantity of their contents.

In the exhalent, or capillary vessels, the muscular coat predominates.—Wounds of the arteries are of two kinds, either wholly or partially divided. The coats of an artery are more elastic than its sheath, consequently it contracts more than the sheath when divided, and is retracted within it. The inelastic sheath falls over the open mouth of the vessel, and in some measure retards the flow of blood, and favours the formation of a clot. The muscular and outer coats of the artery meeting with no resistance, contract and still more diminish the flow. A clot then forms without the vessel, within the sheath, and afterwards another forms within the artery. Inflammation occurs, adhesive matter is thrown out, a part of the coagulum is absorbed, and a part organized, and thus the vessel

is closed. The muscular coat of an artery is stimulated to contraction by the irritation which arises from the injury. The simply elastic contraction takes place immediately, but the muscular contraction continues to increase for some days. Coagulum may form in wounds, but not in amputation. The formation of a coagulum is favoured by syncope and by mechanical pressure from the blood effused into neighbouring parts. When an artery is closed in this manner it becomes obliterated to the next branch; sometimes hardly a trace of it remaining. Less bleeding occurs when an artery has been lacerated than when it has been cut; the extremities are very much constricted, but the contraction is not more than in cuts. The treatment is simple: closing the aperture by pressure, cold, ligatures, torsion, &c.; cold diminishes vascular action and increases contractility. Torsion may be used in small vessels, which is, seizing hold of the vessel with a pair of dissecting forceps, and twisting it round six or seven times, thereby lacerating the internal coats. When a ligature is applied, it should be of fine strong silk, and should be drawn tight enough to cut through the two internal coats. A peculiar sensation is felt by the operator when this is effected. The ligature separates when the artery is closed. Hence is seen the evil arising from broad ligatures. If the ligature be broad, the inner coats are not divided, and inflammation and adhesion do not come on till the ligature has been removed by the ulcerative process. Hence secondary hæmorrhage will arise.

The process of reparation in wounds which partially divide an artery is similar to that which nature employs when they are totally divided. The hæmorrhage which follows is more difficult to restrain, as the artery is prevented from retracting. In puncture of an artery, there is hæmorrhage into the sheath and cellular membrane, which coagulates; the sheath alters its relative position, and the two apertures are no longer opposite. This will depend upon the direction of the wound. Small longitudinal wounds bleed less, and more frequently heal, than transverse ones, the latter being very unfavourable to the process of adhesion. In a transverse wound, the lips are drawn asunder, making the aperture more or less circular. A wound of an artery, if large, very rarely heals. Blood is constantly poured out into the cellular membrane, which, forming for itself a sac and coagulating, is termed diffused aneurism, which is sometimes very extensive. This sometimes arises from puncture of the artery in bleeding. In these cases there is hardly any pulsation in the tumour. The best way to operate upon this kind of aneurism is to apply a tourniquet, make a free opening the whole length of the sac, and then to loosen the tourniquet and mark whence the blood flows, and thus secure the artery. If a tour-

niquet be not applied, the effusion of blood obscures the operation, which will, from this, last for two or three hours instead of five or six minutes. Sometimes the artery and vein lie contiguous, and when the former is punctured, though the external wound in the vein may heal, yet an opening remains between the posterior part of the vein and anterior part of the artery. From the impulse of the arterial current into the vein, the latter becomes enlarged or dilated, forming a pulsating tumour, easily reduced by pressure, and characterised by a tremulous motion and thrilling hissing sound. This is called varicose aneurism; it diminishes when the arm is raised and when the artery is compressed. Long-continued pressure will sometimes cure this kind of aneurism, and Sir A. Cooper has cured several by pressure upon the artery above the tumour. In this, however, I have never succeeded. This disease is seldom dangerous, but sometimes it is necessary to tie the artery. The treatment of transverse wounds of arteries depends upon the size of the wounded vessel. In small arteries the bleeding may be checked by completely dividing them; but in large arteries it is always necessary to apply a ligature either to the wounded part of the vessel, or to the trunk supplying the part. It will likewise depend upon the situation of the vessel, for of course no one would think of enlarging a wound of the palm of the hand to take up an artery, but would secure the radial or ulnar artery.

Veins.—An injury from puncture, or otherwise, is sometimes of serious consequence, and even fatal. Inflammation will sometimes arise from bleeding, giving rise to extreme degree of constitutional disturbance. The outer coat of the veins is looser than that of arteries, it is more vascular, and blends with surrounding cellular tissue. It is not proved that they contain muscular fibres. They are capable of great longitudinal distention, but not transverse, differing from the arteries. When a vein is wounded, the aperture is not closed by direct adhesion: first, a coagulum forms *external* to the vein, which stops the bleeding temporarily; the edges of the wound are *everted*, and a layer of adhesive matter is formed within the vein, which becomes organised, and then the coagulum is absorbed, and another layer of adhesive matter poured out exterior to the vein: this becomes organised, and so much resembles the coat of the vein in structure, that no difference can be perceived,—this has been proved by Mr. Travers. It was formerly supposed, that the veins healed similarly to arteries; which was the opinion of Bichat. In very small wounds of the veins, direct adhesion may take place. When a vein is completely divided, it retracts,—adhesive matter is thrown out in the sheath, which closes the vein by its pressure. Sometimes adhesive matter is poured out into the internal part of the vein, but it is more

disposed to the suppurating process. In inflammation of veins (phlebitis), great prostration and constitutional irritation occur from the very commencement. Much has been said about the danger of applying ligatures to veins. Suppurative inflammation of arteries is very rare. Symptoms of phlebitis: wounded vein tense and red; pain and great tenderness, extending along the veins towards the heart, sometimes in a retrograde direction; great febrile excitement, generally rigors, and sometimes vomiting. The fever is of a typhoid nature,—skin hot, dry; pulse feeble and quick, 120; tongue covered with a brown fur; great anxiety expressed in the countenance, extreme prostration, delirium, and death. At the onset of the disease, local and general bleeding will be useful; but, in the latter stage, I know of no efficient remedies. The appearances after death, are thickened state of the coats, and pus, and serum, in the veins. A ligature should never be applied to a vein if it can be avoided; but it has been done many times, without injury, by Mr. Hey. Placing the finger upon the femoral vein, in amputation, and keeping it there for five or six minutes, will generally restrain hæmorrhage from it. The ligature does not divide the internal coats of a vein, but only the outer coat, the reverse of what occurs in arteries; and the vein does not adhere internally, but externally; thus again differing from arteries.

ON THE
NATURE, ORIGIN, FREQUENCY, AND FATALITY
OF
GASTRO-ENTERIC AFFECTION,

CYCLOPEP

*Asiatic, Indian, Malignant, or Spasmodic
"Cholera."*

Scribendi recte, supere est et principium et fons.

*To the Editors of the London Medical and
Surgical Journal.*

GENTLEMEN,

SHOULD you deem the subsequent remarks, and observations founded on extensive experience, worthy a place in your scientific Journal, you will oblige an admirer of your improved series, by the insertion of them.

I would admonish, primarily, the profession, and public generally, to be done with the non-entity "spasmodic cholera;" the one, for the honour of science; and other, for the peace and welfare of society.

It will be found, on reflection, that mankind from time immemorial has been liable more or less, in summer and autumn, to gastro-enteric affection, which, during certain localities and peculiarities of atmosphere and tempera-

ture, has to a given extent, proved both epidemic and communicable.

I venture practically to illustrate the position by adverting briefly to "cause and effect," for by these we learn much of the prevention, and cure of disease generally. The atmosphere from *without*, or change of seasons, is productive now and then of complicated and alarming indisposition, aggravated greatly, however, by neglect or maltreatment.

Thus, in summer, we have "cholera (the endemic of tropical climes) from hepatic derangement; in autumn, dyspepsia, diarrhœa, or dysentery, from imperfect and vitiated secretion of stomach, and alimentary passages; or, perchance, in lieu of these, constipation and typhus"—and, in winter, and early spring, cerebral, pulmonary, cuticular, cellular, muscular, and ligamentous derangement, the results, commonly, of acute or chronic inflammation, need it be said, the parent of organic affection.

That the former—i. e. summer and autumn classification—under certain localities and temperature, at times, become communicable (yet, by no means, contagious or infectious) is perfectly consistent alike with reason and experience, when we reflect how highly susceptible the secreting surfaces of these passages are of derangement and vitiation, be it observed, through the medium of the senses, and sensations. First, then, as to the atmosphere *within!* Of the many derangements of the secretions of the human body, a highly deteriorated surrounding medium, assuredly, is one of the most fertile of them.

An atmosphere, within a given space, divested of so much of its oxygen, and so redundant in carbonic acid, necessarily must prove offensive and oppressive to the lungs, and retard materially the formation of arterial blood in the system. So manifest appears to me the position that I forbear to dwell upon it.

Secondly; I recal to mind the pernicious, verily mortal influences of the "depressing passions," in states of civilization; for here have we some of the most fertile and fatal existing causes of disease generally.

The faculty hitherto seem not to have regarded sufficiently, in my mind, the baneful operation of the "depressing passions," above all the dread of death, over life and organization, or they would have discovered that both circulation and secretion, were affected to a degree, at times, almost beyond credibility.

From early life I had entertained what were then, and since deemed to be extravagant notions, regarding their enervating and mortal influence; but more recent observation and experience, it must be confessed, have afforded confirmation, "strong as proofs of holy writ," to them. During the "cholera" *panic* in this quarter, I cannot say that I ever witnessed "cause and effect" more charac-

teristically exemplified, might I so express it, in *aspect* and *affliction*.

The former would have afforded some of the most sublime illustrations for the pencil of a Lavater; and the latter added not a little to the philosophy of a Bacon; or the pathological and clinical experiences of a Cullen.

The mortality every where kept pace with the extreme *panic*; and the most susceptible of its influence, say the half-starved, infirm, aged, and intemperate, fell sacrifices to it.

What being, pray, endowed with the ordinary susceptibilities of our nature, could endure the anguish of a certain and speedy dissolution?

During such conflict, both digestion and sanguification were suspended, and the whole blood, to say nothing of its quantity or quality, sent with an impetuosity to the *heart* and *lungs*, which beggared description.

The extreme parts of the body, of course, became cold, cramped, and lifeless, from loss of blood, and consequent defect of nervous energy; and paleness, lividity, and shrinking of feature, (constituting the Hippocratic countenance) followed in train as the harbingers of dissolution.

From so perfect a dissolution of the blood, reasonably, both secretions and excretions of the stomach, and alimentary passages, became most sensibly affected; the nutritive matters, together with the serum of the blood, rapidly carried off persons; and the blood itself, wanting in fluidity and oxygenation from the oppressed state of the lungs, (more venous than arterial) unfitted for the support of animal life. Every symptom, during life, established the doctrines laid down; and dissections, after death, assuredly confirmed them.

The *heart* and *lungs* were found gorged with *venous* blood, and the more distant parts of the body, save the brain, wanting greatly in both venous and arterial, sufficient, at least, for the purposes of the economy.

The stomach and bowels displayed evidences of deranged and vitiated secretion, chiefly.

I accord, most cordially, with that pre-eminent physiologist, my esteemed friend the late Mr. John Bell of Edinburgh, that extreme *nervous* disorder, such as cramps, spasms, syncope, convulsion, &c. originate commonly in a deranged circulation of blood in the brain. It is true, dissections have thrown little light upon such derangements, and why? because the previous affection of brain were of a *functional*, rather than organic nature; consequently we sought in vain, after death, for traces of the immediate source of dissolution.

To be brief, I've no hesitation in saying, that, on the occasion alluded to, the mortality from *panic*, mainly in the north of England, amounted to four out of five: reflect, we only for a moment how readily alimentary derangement, except from organic affection, is

under the influence of judicious treatment and regimen.

Thirdly; on the subjects of *inanition* and *repletion*, connected with the malady, a few, and but few, words must suffice. The mucous, serous, and glandular structures of body are most liable to derangement and vitiation, from *defect*; and obstruction and inflammation, from *excess* of nutritive and stimulant matters in the system; hence we account, in a great measure, for the prevalence, obstinacy, and fatality of gastro-enteric affection in indigent and infirm life. Such your acquired predispositions of body originating in deranged circulation and sensation; our inherent ones, commonly being the results of some imperfection of structure, probably of nerves or blood vessels themselves.

Fourthly; I advert, briefly, to the pernicious, not to say calamitous effects of *ardent spirits* upon *vital* and *alimentary* organs.

That a multiplicity of *sudden deaths* are brought about, mainly, by the abuse of ardent spirits, to say nothing of the many destroyed by *stimulant* treatment; and that a vast many of both have been reported as "spasmodic cholera" cases, who will dare to deny?

Your cramps and spasms, collapsed and fever stages, I affirm, almost invariably were the results of extreme *panic*, or the like abuses, or treatment, chiefly.

Such as were at all acquainted with the rise and progress of the affliction at Gateshead, at any rate, must give me credit for the truth of the assertion.

Insufficient nutriment, uncleanness, and impure surrounding medium, I am aware, had a share in the derangements of the alimentary passages; still the latter, I repeat, so much under the influence of judicious treatment, could scarcely be said to have proved the immediate source of dissolution.

Ardent spirits are well known to prove a fertile source of gastro-enteric and hepatic affection, that is, of cholera, diarrhœa, and dysentery: and I maintain, that the abuse of strong drink, gluttony, extreme panic, or positive organic affection, chiefly, have contributed in this and other countries, to the obstinacy and fatality of them.

Thus have I accounted, it is presumed, without much depth of research or circumlocution, for the spread and fatality of what contagionists, of late, for want of a better name, have defined Asiatic, or spasmodic "cholera."

Finally; two circumstances connected with the endemic, it must be confessed, have surprised me exceedingly. I allude to the farce of a *new* disease; and the idea of its being *contagious*.

A *new* disease!—are medical men really serious? Why, truly, the malady has prevailed in this and other countries, in the form of cholera, diarrhœa, or dysentery, from

time immemorial, and proved obstinate or fatal, in proportion to the panic, poverty, predisposition, or maltreatment of the afflicted, chiefly.

As to its being of Asiatic or Indian origin, have we yet to learn that diseases themselves are the same every where, modified, of course, by circumstances; and that *heat*, natural or artificial, ever conduces to the virulence of them.

With respect to its being *contagious* or infectious, (I like neither of the terms) I reply, deranged or excessive excretion, is governed by *temperature*, rather than atmosphere; and that I cannot conceive the possibility of the spread of such, indeed any affection, by the *external* atmosphere.

Communicable, I admit, it may be, under an highly deteriorated surrounding atmosphere, observe, through the medium of deranged sense and sensation.

In a word, the man of true science, experience, and integrity, must look upon *contagion* as a bugbear, calculated to delude the credulous, and foster the prejudices of bewildered and inexperienced men.

Had I not already encroached upon your valued columns, I could have afforded your readers an ample expose of the rise, progress, and treatment of the endemic, of late months in this part of the country; which, if I mistake not, would have demonstrated to a problem the absurdity of measures, preventive and curative, from beginning to end; together with the presumption of certain authorities "that it became necessary to spread a net large enough to catch all the fish." Presumptuous and contemptible, truly! in application to men of acknowledged integrity, science, and experience; much to their credit be it said, the staunch *opponents* of the most extravagant and unprecedented *mock philanthropy* and *vague theories* ever contemplated, much less maintained, I solemnly declare, in a civilized and enlightened country.

I remain, Gentlemen,

Respectfully yours,

WM. HORSLEY, M.D. &c.

North Shields,
March 15th, 1832.

P.S. In August, and during a part of September, 1825, I deem it worthy remark, that "cholera prevailed with unusual severity in this part of the country, from excessive sultry weather; and exhibited many of the symptoms of the endemic, with the exception of the *bilious* evacuations. The cramps and spasms, at that period, were peculiarly manifest, and gave way rapidly, to diminished doses of calomel and opium.

ON INTERMITTENT NEURALGIA,

By JOHN MADDOX TITLEY, M.D.

THERE are few diseases which prove more perplexing and intractable to the physician than certain neuralgic affections; nor are there any which can be more speedily, or with greater certainty cured, when they assume an intermittent character. I had, indeed, imagined that the treatment of intermittent disorders was so well established, and so generally understood, as to be almost "tonsoribus notum." The following case, however, will evince that I have been much mistaken in that supposition. The publication of it, therefore, in the pages of your periodical, may not be without utility, since it may demonstrate how far an agonising affection may be protracted when opposed by inefficient means, and how almost instantaneously it may be arrested by appropriate treatment.

W. C. 27 years of age, residing near Kensington, and whose avocations exposed him to frequent and considerable alterations of temperature, was attacked in the middle of January last, on the left side, with a severe pain of a throbbing, lancinating character. He was bled, blistered, and subjected to antiphlogistic treatment. Thereby the side was relieved, but the pain shifted its seat to the pit of the stomach, where it came on with great severity every evening about eight or nine o'clock, lasting until morning. During its continuance the abdominal muscles are represented to have become tense and firm as a board. If, during the paroxysm, a glass of hot brandy and water were taken, it had the effect of driving the pain from this position to the left hip. After about a week the pain ceased to recur at the scrobiculus cordis, and became confined to the left thigh and hip, the paroxysm commencing about ten o'clock every night, and lasting until morning. The attack was always sudden, beginning with a violent throbbing in the left hip, and succeeded by a gnawing lancinating pain down the outer side of the thigh, as far as the knee, and sometimes even so far as the middle of the leg. So intense was his suffering during the paroxysm, that his whole frame was thrown into violent agitation, and he experienced unquenchable thirst. Towards morning he broke out into perspiration, and the pain left him, to return again at night. Thus had he gone on for nearly a month, obtaining no relief, and supposing that *all had been done for him which could be done*, he came to town to his mother, to try what change of air and the assiduities of home would achieve.

I was requested to visit him on the evening of Sunday the 26th of February, when I learned the preceding history of his complaint. I found him much reduced in flesh,

and worn out for want of sleep, and from the agony he nightly endured. His tongue was coated near the root, and his bowels rather confined. I prescribed as follows, and left him with an assurance that his sufferings would not be of long duration, if he strictly followed my directions.

R. hydrag. submuriat. grā. vj. Pulver. opii. pur. grā. ij. Conserv. rosæ q. s. ut fiat pilul. ij. hora somni sumendæ et cras primâ aurorâ haust. sequent.

R. Infus. sennæ f3x. Magnes. sulphat. 3vj. Magnes. carbonat. grs. xv. Tinct. cardam. comp. f3ss. misce.

R. Quinin. sulphat. grā. vj. Acid. sulphur. dil. m. vj. Aq. distillat. f3iss. m. fiat haust. 4ta. quaque hora sumendus, incipiente hora nona matutina.

27th.—10 o'clock. The paroxysm of pain came on about ten o'clock last night, and was one of the most severe he has had. The agitation of his body was so great as to shake the room wherein he lay, and his groans so loud and heart-rending, as to prevent any of the inmates of the house from sleeping. The aperient draught not having been taken so early as prescribed, had not yet operated, and he had not commenced the quinine. He was instructed to take a dose immediately, and repeat it every *three* hours.

10 o'clock, p. m.—Has just taken his fourth dose of quinine, and is anticipating a return of the pain. Gave him two teaspoonfuls of Morson's Tincture of Morphia (of the strength of T. opii. ph. L.) with directions to repeat one teaspoonful of it at longer or shorter intervals during the night, according to the severity of the pain, and the effect produced.

28th.—The paroxysm did not recur last night, though he obtained but little sleep owing to the morphia having affected his head, and he vomited this morning.

Cont. haust. quinin. 4tis horis et sumat tinct. Morphiæ coch. parv. i. aggrediente paroxysmo doloris et pro re nata repetat.

29th.—Soon after getting into bed last night the paroxysm commenced as usual, with a severe throbbing pain, and which he thought promised to be very violent. He rose, and took a teaspoonful of the tincture of morphia, with the effect of preventing any increase of pain, and the attack terminated in two hours.

Cont. haust. quinin. et si opus sit tinct. morphiæ.

March 1st.—Had no return of pain last night, and slept soundly the first time for several weeks.

Perstat in usu quiniæ.

6th.—Has continued free from pain since last report, and has enjoyed nightly, sound and refreshing sleep. The quinine has been taken in diminished doses. He returns to the country to-morrow, but is enjoined to continue the quinine, in doses of four grains twice a day for another week.

19th.—Being in town the day before yesterday, he visited his mother, and reported himself free from pain, rapidly regaining strength, and in perfect health.

For illustration of the same subject I subjoin two other cases:—

1. About three years ago I attended a young lady a few miles from town, with a similar neuralgic affection, but confined to the right side of the neck and face. The paroxysm commenced also at night, about eleven o'clock, with a violent throbbing in the neck, followed by lancinating pain over the side of the face, which continued until morning. So excruciating were her sufferings that she was unable to lie in bed, but paced the room all night in agony of distress. During the paroxysm the veins of the neck were stated to be greatly distended, and the head felt as if it would burst. I therefore deemed it prudent to have her cupped in the neck to a pint, but without producing the slightest alteration in her sensations. The sulphate of quinine, given in two grain doses every three hours, in a few days effected a cure. Some weeks afterwards, during the prevalence of easterly winds, this young lady had a relapse, and of her own accord resumed the quinine, with the desired effect, and has since had no return of the complaint.

2. Much about the same time I met with another case in a young female, where the pain was also in the face and neck. The accessions coming on daily at two o'clock in the afternoon, with a throbbing at the right temple, preceded by yawning and chilliness, and followed by excruciating lancinating pains on the side of the neck, face, and head, with great noise in the ears. There was extreme tightness and fullness felt in the head, as if it was about to be rent asunder. The paroxysms lasted some hours, and then declined, leaving her well during the intermissions. Cupping and leeches freely applied over the affected parts, afforded only momentary relief, the same sensations recurring on the following day; but the disease yielded speedily to quinine.

About the corresponding period of the next year she was again attacked by this affection, the paroxysm coming on about twelve o'clock at night, and waking her from sleep. It continued some hours with extreme agony, and then subsided. The severity of the pain was mitigated by morphia, and the disease was again speedily subdued by the sulphate of quinine, as before. She has now been two years free from any return.

2, Euston Grove.

VIEWS ON THE PATHOLOGY AND TREATMENT OF CHOLERA.

By G. D. DERMOTT, Esq., Lecturer on Anatomy and Surgery.

GENTLEMEN,

I BELIEVE that this disease, like many other epidemic diseases, although communicable by miasma in the atmosphere, and originating or being produceable from a peculiar state of that acting upon the earth, is sometimes contagious (or communicable from person to person) and sometimes not contagious. I believe the contagious nature of the disease depends, first, upon the number accumulated in one place, and the unhealthiness or ill ventilated state of that place; or, in other words, upon the degree in which the miasma is condensed: secondly, upon the length of time a person remains exposed to the poison: third, upon the debility, morbid irritability, and consequent susceptibility of the person's frame, especially of the abdominal viscera. Persons affected with Indian cholera, in an unventilated apartment, I believe, are individually the centre of miasma, or a contagious atmosphere, but which *to be strong enough to become contagious*, must arrive to a certain degree of concentration; and the effect of this invisible poison, like that of any other poison, depends upon its strength, conjoined, however, with a susceptibility in the persons to be affected by it.

I need scarcely say, that there are different degrees of susceptibility of constitution, both natural and acquired, and that the principal causes of the acquired susceptibility are bad locally situated, filthy, and ill-constructed habitations, in as bad a neighbourhood; and more especially adulterated, non-nutritious, and scanty food, with stimulating liquors, injudiciously taken as to quantity and time, and as unfortunately selected on account of the adulterations which they contain: for the poorer class are obliged to buy the cheapest and the worst of almost every commodity of

life. May I not also add, agitation and anxiety of mind, on account of embarrassed circumstances, which now so generally prevails through the poorer class of society; for mind has more influence over the condition of the body than physical agents. Depression of spirits frequently causes the rapid developement of liver complaints; and fear itself often produces the most violent diarrhœa.

With regard to the miasma in merchandise or clothing, like the miasma on or around an infected individual, if exposed to the open air, it shall be so blown off, dispersed, and diluted, as to produce no injurious effects; but, on the other hand, a sailor coming from aboard ship with the same articles or clothing, and placing them in a close room, which he may occupy on shore, perhaps, too after having increased his susceptibility by debauch, shall catch the cholera himself, as well as any companion similarly situated. I believe also that water is a vehicle to cholera, and which, when divided into minute particles in the form of vapour, is a medium for its suspension in the atmosphere and a sort of solvent.

As to the nature of cholera morbus, it is pretty evident to me that it is the effect of effluvia, emanating from the body of a person, from articles of merchandise, or drifted from place to place in the currents of the atmosphere. This poisonous effluvia received into the prima via, produces its first effects upon the stomach, alimentary canal, and organs immediately associated with them, by, I think, producing *a spasm of the muscular coat of the abdominal arteries* (the poison being also perhaps received into the very circulation itself, through the lacteals, as well as through the absorbents of the skin), at once arresting thereby their natural actions, and suspending or considerably diminishing the alimentary secretions; and in association with the morbid depression, produced by the virus in the nervous system, we have this spasmodic affection ranging not only

through *the whole of the vascular system*, but through *the whole of the muscular system*, voluntary, semi-voluntary, and involuntary muscles; I believe all are spasmodically affected; and because the heart and arteries are more muscular than the veins, the former are more spasmodically contracted than the latter, occasioning the stagnation and coagulation of blood to take place in the veins. I believe also that the capillaries may assume such an action as to cause an emanation of miasma from the skin.

The only *preventive plan* as to drink and diet, that I can suggest, is to keep the powers of the vascular and nervous systems as high as possible, or as near as possible approaching to a state of full health, avoiding the depression of the system from all depressing causes, especially fear, and, on the contrary, rather engaging the system continually in a state of slight excitement, (at least the inhabitants should do this when the complaint shews itself in or threatens any place), by some stimulus, very moderately affecting the whole of the vascular system, besides acting as a local stimulus in the stomach; for we know that when the system is engaged with one stimulus, it is less susceptible of being acted upon by another agent. Persons should, therefore, take *moderate* potations of genuine brandy, or of any other liquor which their experience teaches them agrees with them the best; by this means an increased activity and tone is given to the stomach, and a due supply of nutriment, strength, and healthy irritability is furnished to the system. The poorer class, it is true, cannot afford brandy; but those who have employment can afford themselves strong beer and a moderate quantity of animal food. But in order that those out of employ and in a consequent state of wretchedness, shall, at least for a time, be provided with the necessaries of life, so as to lessen their predisposition to cholera, I propose that a *national fund* be raised on a very large scale, and placed in the hands of Government,

that the poorest inhabitants in the various parts of the "United Kingdom" shall be supplied with food, by the formation of soup-kitchens, and the administration of a moderate quantity of strong beer per diem, under the superintendence of the Medical Boards and Police.—"Give strong drink unto him that is ready to perish, and wine to those that be of heavy heart. Let him drink, and forget his poverty, and remember his misery no more." (Prov. chap. xxxi. ver. 6. and 7.) For the physical debility, and morbid susceptibility to cholera or other disease in the poorer class, cannot be diminished without this. And that this fund shall be sufficient for its purposes, the rich should come forwards, not with their tens and twenties, but with their hundreds; nay, the most wealthy with their thousands, if they really wish to make a favourable impression upon the condition of the poorer (now, unfortunately, far the most numerous) class of society, and to bulwark the nation against the disease. Surely, if one person can devote 50,000 pounds to the support of boroughmongering, and if others can throw their thousands into the lap of luxury, draining the resources of the nation from their just channels, worm-eating the rights of merit and industry, and sacrificing them to the shrine of family interest, intrigue, and hereditary advantages, thereby producing poverty and susceptibility to disease in the more numerous part of the community; surely they can afford a few thousands for the salvation of the poor? This would be much better than their enjoining a fictitious fast, but still continuing in that system of sin which has produced some, and rendered us vulnerable to the rest of the calamities now threatening us.

I remain,

Your very obedient servant,

G. D. DERMOTT.

Hospital Reports.

ST. GEORGE'S HOSPITAL.

Clinical Remarks by Dr. Seymour.

THERE are two patients now in the hospital under my care, who came in with affections of the chest, and labouring under anasarca. Dropsy is an effusion of fluid, either into a cellular membrane, or into an open membrane. If there is anasarca, you may rely upon it that there is disease within the cavity of the chest of the organic structure of the heart. The passage of the blood to the right side of the heart is impeded; the blood becomes obstructed in the extremities of the vena porta, and the small arteries of the peritoneum pour out fluid, and thus the disease of anasarca is fast set up. Should the patient, together with organic disease of the heart, have organic affection of the aorta also, then he will have great pain; he will lean forward to endeavour to relieve himself from this pain; his countenance will be expressive of the greatest agony and horror of instant death; there will be great pain in the left arm, and blueness of the face from congestion of blood in the smaller vessels; and anasarca follows. In the disease of the heart, the dropsy is a primary symptom; in the aorta it is secondary. In ossification of the mitral valves, the blood becomes stagnated about the heart and lungs, and hydrothorax is the consequence. These organic diseases are most commonly found to occur in old age. In young persons you will have hydrothorax from inflammation of the serous membrane of the heart. In cases where, from disease of the heart, the powers of life gradually sink, upon examination of the body after death, you will find portions of lymph in the columnæ carneæ; and on opening these small portions of lymph, a drop of pus is found in each.

Purpura hemorrhagica is more fre-

quently a symptom of disease than a disease itself—you find it in scurvy, in pregnancy, and in an inflamed state of the serous membranes; this latter circumstance you will not find named in books. I am induced to notice it, from having frequently found it in practice. Purpura hemorrhagica is caused by the rupture of some of the minute vessels, which form these slight sanguineous spots under the skin; when purpura hemorrhagica arises from scurvy, it will be best cured, by the patient leaving off his salt diet, and giving him acids, such as lemon juice, &c. &c. Where peupura hemorrhagica arises from inflammation of serous membranes, you had better give calomel and opium, until the mouth becomes affected, when the patient will be cured.

Clinical Remarks by Mr. Brodie.

An abscess in the spineter ani muscle, or a fistula in ano, does not heal readily, owing to the constant action of the muscle, but if you cut the muscle through with a bistoury, and thus prevent its action, it will soon heal.

A case of aneurism of the aorta was admitted into one of the hospitals in Paris, some years ago, and whilst the man was in the hospital, he improved so much in health, that he left, and was absent for *two years*. Such cases as these are, however, very scarce. You will find an account of some cases of aneurism cured, in Mr. Hodgson's valuable work on the arteries, to which I would more particularly refer you. In cases of aneurism of the aorta below the arch, the artery becomes obliterated. I very much doubt myself, the efficacy of bleeding in cases of aneurism: it diminishes the quantity of blood passing into the sac; but, on the other hand, it deprives it of that tendency to coagulate, which tends to fill up the sac, and promote the natural cure of the disease, and it also renders the action of the heart more irritable.

In a case of disease of the upper portion of the left ala nasi, near the internal angle of the eye, Mr. Brodie first supposed the disease to be venereal; the patient had been very much exposed to cold some time before, when she had great soreness of the roof of the mouth, but without any soreness of the throat. She was admitted into the hospital, and took sarsaparilla, under which treatment she grew fat, gained strength, and appetite considerably, but that was all. She left the hospital and was re-admitted again; the soreness having left the roof of her mouth and gone to the bones of the nose; portions of bone are now enfoliating; there is a most offensive discharge from the nose, the left eye is closed, and the eyelid is inflamed; she has never had any symptoms of syphilis, no nodes or pains in the tibiæ at night. While she was out of the hospital, she took some bitter pills, which were given her by a private practitioner, but never took any mercury. Mr. Brodie remarked upon the case, that it was a most interesting one; presenting some formidable symptoms, which if not subdued, would destroy the patient. The cases in general terminate in epilepsy and mania, observed Mr. Brodie, and I have known one or two instances where this has occurred. This girl has never tried mercury, we will therefore give it a trial. Let her rub in ung. hydrarg. fort. ʒss. o. n. h. s.

The operation of tying bleeding hemorrhoidal vessels, is one very seldom witnessed in hospital practice; in private practice, however, it is one which you are called upon to perform very often; as the habits of the higher classes predispose them more to this class of diseases than the poor. The operation of tying hemorrhoids is a very safe one; I do not think, that I ever lost more than one patient by this operation, out of three hundred on whom I have performed the operation, and this case was a very bad one: the patient used to lose large quantities of blood

every time that he went to stool. In the case on which am I now about to operate, I understand the patient is in the habit of losing a pint of blood sometimes at stool; the man is very much blanched, and has a pale, sal-low complexion, indicative of great debility and weakness from loss of blood; he has also some affection of the chest, but it is impossible to determine in what state the man's bodily health is, whilst he is suffering under such severe and frightful hemorrhage. We must first look to the hemorrhoids, and then, when we have cured them, we will attend to the man's state of general health.

It is rather a dangerous thing to tie internal piles, but external piles you may always tie with safety. I used at one time, to cure external piles by cutting them off, and this method I was led to adopt from having met with a copy of Mr. Cline's lectures, in which he says, "that cutting off external piles, is the most safe and certain way to rid the patient of them, and that none but the most timid surgeons ever tied them;" and knowing Mr. Cline to be a most cautious and careful surgeon, I followed his advice, and cut piles in several instances; but I was soon obliged to desist from this plan of treatment, owing to the excessive and alarming hemorrhage which took place; and since then, I have always cured hemorrhoids by the ligature.

Hospital gangrene, is nothing more than a common gangrenous ulcer; and I believe it derived its name, principally, from appearing sometimes in hospitals. I have never found it differ in its character from other gangrenous ulcers.

In a case of inflamed bursa under the ligamentum patellæ, which had been reduced by means of blisters, but in which the patient still complained of much pain, Mr. Brodie remarked that, the affection was more of an hysterical nature than any thing else. The patient shook with pain when the skin was pinched up, or even before the skin was touched;

she had beside, all the appearances of an hysterical person; and the menstrual secretion, had never been in proper quantity. Mr. Brodie ordered her,

Infus. Valerianæ ʒxj.

Tinct. Valerianæ ammoniat ʒj. ter in die.

Monday, March 26th, 1832.

Abscess.—An abscess will never heal, except the opening into it permits the matter to be discharged as fast as it is secreted and formed.

Aneurism.—When the aneurismal sac sloughs away, the aneurism is always cured, but only by a long coagulum being formed in the tube of the artery. When the old operation was performed, the patients never recovered, for Mr. Pott expressly remarks, that it was always considered better surgery to amputate the limb; and the only cases in which the old surgeons would perform the operation was for popliteal aneurism; and then they made an incision down through the skin and muscle, over the course of the artery, and ran a needle, almost at random, through it, and tied it.

Stricture.—Strictures situated in the anterior part of the canal of the urethra are generally permanent, and consist of a gristly thick unduration of the lining membrane of the canal. These strictures are very difficult to cure—much more so than those situated further back in the membranous portion of the urethra. These latter ones are generally spasmodic, and permanent as well; but the former ones constitute the true permanent stricture. Now for these anterior gristly permanent strictures. I think the best cure is to pass a catheter, and cut down upon it, and let the wound heal and unite again over the catheter. Mr. Stafford's method of curing strictures will not apply to these cases; for in cutting through the stricture, there is very great chance of your cutting into the cells of the corpus spongiorum of the penis, wherein

the urine would get infiltrated, and you would have, in consequence, very bad symptoms come on. The application of the lunar caustic will not do either in these cases of permanent gristly stricture: caustic is only beneficial in cases of spasmodic stricture, such as I have said occur in the posterior or membraneous parts of the canal.

Fistula in Ano.—In dividing the sphincter ani muscle. In these cases I never apply any dressing whatever. I only apply a poultice. In a very bad case which I had in my private practice, in which there were a great many sinuses, I followed this plan of treatment after the operation, and found it to succeed very well. In dividing the sphincter ani for fistula in ano, you should completely cut through the muscle, and then, when the muscle contracts, it only serves to draw the cut surfaces apart from each other—if you only divide the muscle partially, the contractions of it only bring the divided edges nearer to one another.

ST. GEORGE'S HOSPITAL.

“Compliments pass when Gentlefolks meet.”—*Old Proverb.*

GENTLEMEN,

WE are all in a sorry condition here, and stand most strongly in need of some medical and surgical advice; I therefore supplicate you in our behalf, and hope you will afford me a small space of your pages, on which to indite the heavy grievances under which I and my brother bucks labour. Few of our officers are fit to perform the duties of the situations which they fill. Our hospital is yet partly in embryo; the body had one limb present, but the other limb remains impacted in the uterus, or in the fangs of those living vultures, the lawyers; and from the above facts you will readily perceive, what little benefit the pupil must receive who attends here for instruction.

It is very true sirs, that we have a *stone* hearted man-midwife here, who now and then stuns our ears by hammering about some dead man's pelvis; but this is all he does, and unfortunately for us, our labour-pains remain as great and as violent as ever. We have a colleague of his, who comes from Davis's Straits, and straight enough in all conscience he is, now and then relating to us some wonderful cases of obstructed vagina, with which his fertile imagination seems pretty well stored. In scientific knowledge, however, this man betrays the place of his birth, for when he touches upon it, he is very much like a whale. We have a worthy mortal here, who rejoices in the name of Roderick, and who in his lectures on *materia medica* sapiently informs us, that camphor is not colchicum and that digitalis is not given in quart doses; adding by way of commentary, that he learnt this fact from his grandmother. Alack, alack, sirs, he looks the very image of her, when dressed in a Lincoln green coat, and Dutch inexpressibles of the same colour. He enters the lecture room one morning in every week, and lays on the table, the current numbers of “*The London Medical Gazette*,” accompanied with some half dozen significant hears, and a voluntary contraction or two of the levatores labii superioris *alæque nasi* which give to his countenance, very much the likeness of ————. I leave your readers to supply the hiatus. Of Dr. Seymour I shall have more to say on a future occasion. Dr. Chambers is the main prop of our school; his lectures display great erudition, talent, and perfect acquaintance with the subject on which he is lecturing. I need only direct attention to his discourses on fever, which might be heard with advantage by many of the elder members of the profession. Dr. Dickson, our able professor of Botany, lectures to an olla podrida stock of auditory, such as I am sure never entered Noah's Ark; to wit—great coats, umbrellas,

sundry dressers, trays, and two pupils; he lives, I believe, in the hope that the more he is heard the more will come to hear him; his head, if not a *caput mortuum* is sadly flattened over the region of prognostics and diagnostics in this respect.

In our hospital too, sir, we have decidedly bad house surgeons. Dressers and apothecary cry out that they have not sufficient accommodation in the building; and whilst the exterior of it looks as new and light as lime white can make it, the cracks and crevices, and corners which open upon you in every ward and passage in the interior, shew with what shameful and negligent haste the present building has been constructed; alike discreditable and disgraceful to the architect, the builder and the whole body of the building committee; you may judge for yourself, sirs, what sort of a lecturing theatre and museum we have, when I tell you, that they were originally intended for laundries; more than this too, they are highly inconvenient for the pupils, and the museum for eight hours out of the twelve, is shut. Closed doors always betray bad work, and this instance, I am sorry to say, forms no exception to the general rule.

Of our surgical officers, I have to say somewhat, but here too we want a Reform Bill, sadly; one that will reform the Robertses, and the Benjamins, and the Collinses who, although they may think themselves great men in their way, are, however, but very little men in their deeds. Mr. Keate walks round the hospital, with five pupils behind him, and I believe they are all as wise when they have been round, as before they went. Mr. Brodie now and then favors us with a few valuable clinical remarks; but they are like comets, few and far between; and until the Princess Louise recovers, I am afraid we shall have but little of his instruction. If Mr. Brodie could come more regularly to one hour (one p. m.) it would save much of the pupil's time.

Messrs. Hawkins and Babington do,

perhaps, what they can to convey instruction to the pupils, but it amounts, unfortunately, to very little. Mr. Walker very wisely *keeps an eye* on the *eye patients*, they are, perhaps, as much as he can *look after*. We have a pupil's room, which contains three broken chairs, two schoolboy forms, and an old table!! and two pieces of furniture called bookcases, which are always kept locked for the use of the pupils! and one of the latest gifts to the library consists of seven volumes of the London Medical Gazette, presented by the editor, Roderick Macleod, M.D., &c. &c. &c. Can any thing be more valuable?

A BRICK OF THE OLD HOSPITAL.

P.S. You shall hear from me again shortly.

BIOGRAPHICAL SKETCHES OF BRITISH PHYSICIANS.

LINACRE, who had the glory of having projected the Royal College of Physicians, was one of the most accomplished scholars of his time. Of his translation of the works of Galen, Erasmus spoke in the highest terms. In writing to a friend, he says—"I present you with the works of Galen, by the help of Linacré, speaking better Latin than they ever spoke Greek." There are two copies of this work in the British Museum, one of which was the presentation copy of Henry VIII. the other of Cardinal Wolsey, and both in the finest condition.

CAIUS, who flourished in the reigns of Henry VIII. and Elizabeth, left translations of parts of the works of Hippocrates and Galen, and a corrected edition of Celsus, besides a translation of the Greek and Latin languages.

HARVEY, the immortal discoverer of the circulation of the blood, gave a new æra to medicine by this great and splendid discovery. The original MSS. of his lectures are preserved in the British Museum; and his anatomo-

mical preparations may be seen in the Museum of the Royal College of Physicians. He published his Treatise on the Motion of the Heart and Blood at Frankfort, in 1628, a work to be found in few medical libraries, and one in which the Courts of Examiners of our medical faculties ought to examine their candidates. This illustrious individual was physician to St. Bartholomew's Hospital, to King James I. and Charles I. He examined the body of Thomas Parr, who died Nov. 14, 1635, at the age of 153. We are indebted to the Family Library, No. XIV., *Lives of British Physicians*, for the following interesting account of the life, death, and autopsy of this extraordinary instance of longevity:—

“He was a poor countryman, who had been brought up from his native country, Shropshire, by Thomas, Earl of Arundel, and shown as a great curiosity at court. At the age of 88, he had married his first wife; at 102, he had done penance in church, for a breach of the laws provided against incontinency. When he was 120, he married again, taking to wife a widow, with whom he is represented to have lived upon the most affectionate terms. At 130, he had threshed corn, and done other agricultural work, by which he gained his livelihood. His usual habits of life had been most sparing; his diet consisting of coarse brown bread, made of bran; of rancid cheese, and sour whey; but when, on his arrival in London, he became domesticated in the family of the Earl of Arundel, his mode of living was changed, he fed high, drank wine, and soon died.

“According to Harvey, who opened his body, his death was occasioned by a peripneumony, brought on by the impurity of a London atmosphere, and the sudden alteration of his diet. There were adhesions of the lungs to the pleura on the right side; his heart was large, his intestines sound; but the cartilages of his ribs, instead of being ossified, as they generally are in elderly persons, were, on the con-

trary, soft and flexible in this man, who was more than a century and a half old. His brain was sound; he had been blind for twenty years before his death, but his hearing was distinct; his memory was very bad.”

In 1657, he published his *Exercitationes on the Generation of Animals*, a work still quoted by every physiologist and obstetric writer. He relates many cases in which he performed the most difficult obstetric operations, and must be considered the first practical obstetrician in England. His two works, to use the language of his biographer, “had rendered him immortal.” These are alluded to by an inscription on the white marble statue erected by the College, which represents him in the doctoral robes. His treatment of gout was extraordinary, and proved fatal to some illustrious physicians since his time. When he laboured under gout, he sat with his legs bare, even in frosty weather, on the leads of his brother's house, or he immersed them in a pail of cold water until he could bear the cold no longer; he then betook himself to his stove. At other times he was troubled with insomnolence, and to remedy this he got out of bed and paced his chamber until he began to shiver, when he returned to his bed and soon fell asleep. The celebrated Dr. Franklin also practised this last method with success.

ADDRESS

TO THE

MEDICAL PROFESSION,

And to the Public generally.

THE present alarm respecting the disease which is now said to exist in London and its vicinity under the name of Cholera, is maintained by some to be unfounded or exaggerated; while by others it is asserted, that this alarm is neither without cause, nor disproportionate to the danger. Whence such diversity of opinion may

have originated, has not been ascertained; nor has it been discovered whether there be any reasonable cause for the prevalence of opinions so opposed.

This unsettled state of the public mind has been productive of consequences the most pernicious. Our national relations have been injured; our internal prosperity has been shaken. The medical profession have been aspersed by one party, as encouraging panic without cause; and by another, as concealing from the public eye the real nature and the full extent of the disease.

To clear the character of the medical faculty of these aspersions by enquiring into the actual causes of this general alarm, and to reconcile these conflicting opinions, a Medical Association has been formed, to investigate the nature, modes of propagation, extent and treatment of that disease, and lay candidly before the public the results of its enquiries.

As this association belongs to no exclusive party, it advocates no exclusive views. The practitioners, of whom it is composed, espouse no theory; they support no faction; their bond of union is the public good; their common object is the cause of truth. Their interests are promoted neither by encouraging excitement, nor by resisting just alarm. If the disease known under the name of Cholera exist in London, their object is to ascertain its extent, to elucidate its causes, to explain its management, and to restore the tranquillity of the public, by an honest statement of the truth.

An Association formed with motives so pure, and an object so important, can have no enemies but those of science and of mankind. They, therefore, look to the public for countenance, and to the profession for assistance.

They more especially solicit the co-operation of the medical officers of parishes and guardians of the poor. As they intend no opposition, they anticipate no resistance. In the truest

spirit of philanthropy have they been organized, and with the most rigid respect to truth and candour will all their labours be conducted. They feel that the principles which they follow can lead them only to truth, and they are persuaded that the plan upon which these principles shall proceed, can scarcely fail to ensure ultimate success.

The proceedings of the Association shall at all times be open to inspection; the register for the admission of members is now prepared for signatures; and while they express the most friendly feelings towards such as may decline to join them, the Association earnestly solicit, and confidently hope for the speedy co-operation of all, who are zealously attached to the interests of medical science, and wish sincerely to promote the welfare of the human species.

LEONARD STEWART, M.D.

Chairman.

All Communications to be directed, post paid, to Dr. MORRIS, 17, Southampton Street, Strand, where the Register for enrolling Members lies open for Signatures.

DESCRIPTION OF CHOLERA BY THE ANCIENT AUTHORS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

As many persons still affirm that the prevailing epidemic is a new disease, I have sent you the symptoms of cholera described by Aurelianus, who flourished in the fourth century, and Aretæus, who is supposed to have practised between the reigns of Vespasian and Adrian. Your Journal is advocating the utility of an acquaintance with ancient writers at a time when it appears to be most necessary.

Description by Aurelianus.—The choleric passion is commonly preceded by heaviness and tension of the stomach, anxiety, tossing, watch-

fulness, griping of the intestines, accompanied with that species of noise, termed by the Greeks borborismus; pain of the belly, and wind from the anus, which affords no relief; nidorus eructations, nausea, preternatural discharge of saliva, sense of weight about the thorax, with heaviness of the members. Upon the approach of the complaint itself, the patient is attacked with continual vomiting at first, as it frequently happens, of the vitiated aliments, and of yellowish humour and bile. The matter evacuated, resembles the yolks of eggs, and afterwards appears porraceous and ceruginous, and last of all black. The belly is also disturbed, and painful; whilst the excrements are, like the matter discharged by vomit, frothy, and highly acrid. The patient is also troubled with frequent retchings to vomit. As the disorder increases, an aqueous and thin liquor, which sometimes resembles washings of flesh, is discharged by stool. Whitish pituitous strings are also generally evacuated with these humours, and a thick pulse follows, with coldness of the limbs, and blackish colour of the countenance, preternatural heat, and insatiable thirst, hurried respiration and contraction of the limbs, with tension of the nerves, calves of the legs, and arms. The patient is also afflicted with rising of the præcordia, with pain similar to the iliac passion. Occasionally the evacuations are bloody, the countenance emaciated and slender, the eyes red, and lastly, the patient is attacked with a hiccough. In the context it is remarked:—In this disorder, the stomach, belly, and intestines, are more intensely and quickly affected; but simultaneously all the other members of the body are drawn into consent.—Cœl. Aurelianus. *Acut. Morb. Lib. 3. Cap. 19. 20.*

Description by Aretæus.—The cholera morbus is a reflux of matter from the whole body on the stomach, belly, and intestines; the disease being of a very acute nature, the

stomach discharges its contents upwards by vomiting, and all the humidity of the body and intestines by stool. The vomitings are at first aqueous, and the fæces of a liquid consistence, and fetid, the disorder proceeding from continual indigestion; when the liquid matter is evacuated, the stools become pituitous and afterwards biliary. At first, these evacuations are easily performed, but are subsequently attended with gripes of the belly, and racking pains of the stomach.

Should the disease increase, the gripes are more severe, there is lipothymy, resolution of the limbs, restlessness, with aversion to food; or if any be received, it is rejected with great noise and nausea, satiated with yellow bile, and the motions are of a like quality. The patient is seized with convulsions, and contractions of the muscles in the legs and arms; his fingers are bent; he becomes vertiginous, and afflicted with hiccough; his nails assume a livid hue; with general coldness, refrigerated extremities, and universal rigor.

If this complaint takes a fatal turn, the patient falls into perspiration, and ejects black bile upwards and downwards; the urine is suppressed from convulsion of the bladder; nor, indeed, is any urine obtained, the moisture being diverted from the intestines; the voice fails; pulse very small and frequent, as in syncope; he is continually striving to vomit, but nothing is brought up, and is constantly wishing to go to stool, as in tenesmus, but voids only dry matter, deprived of all moisture. The disorder terminates at last, in a painful and miserable death; attended with convulsions, strangulation, and fruitless retchings.—Aret. de Caus. et Sign. *Acut. Morb. Lib. 2. Cap. 5.*

I remain, Gentlemen,

Your obedient servant,
C. J. B. ALDIS, A.B.

Trin. Coll. Cambridge,
March 26th, 1832.

Reviews.

Elements of Practical Pharmacy. By ROBERT JOHN KANE, Professor of Chemistry, Apothecaries' Hall, Dublin, &c. 12mo. pp. 349. Five Plates. Dublin. — Hodges and Smith.

THIS is a valuable work for the apothecary or general practitioner, who wishes to prepare his own medicines. It explains the principles upon which the more important pharmaceutic operations are founded, and thus fills up the want in the pharmacopœiæ, and the theoretic views of systematic works. The author illustrates his subject by selections from the Pharmacopœiæ, and gives numerous representations of chemical apparatus. A work of this kind was a desideratum; it instructs the pharmacist in his art, and enables him to procure his medicines, without referring to the chemist or druggist, which is a great advantage.

The Catechism of Health; a sure Guide to Health and Longevity. By BERNARD CHRISTOPHER FAUST. Translated from the German; by a physician.

THIS Catechism of Health will be read with interest by the general reader. It was arranged and published at the express desire of a German princess, in 1792, as during the preceding year a fatal dysentery destroyed great numbers of the people of that country and Switzerland, and bore a close analogy to the prevailing cholera. This work was introduced in schools, and became so popular, that 80,000 copies of it were sold; and it has been translated into all the European languages. The translator has added some notes on cholera. It also contains some remarkable instances of longevity. John Rovin lived to the age of 172 years; and Sarah, his wife, to the 164th year of

her age: this couple were married 147 years, and their youngest son, at the time of their death, was 116 years old.

Official Reports made to the Government. By Sir WILLIAM RUSSEL, Bart. and Sir DAVID BARRY, Knt. on the Disease called Cholera Spasmodica, as observed by them in Russia, 1831; with an Appendix and other Papers, Extracts of Letters, Reports, and Communications received from the Continent, relating to that Disease. 8vo. pp. 147. London, 1832.

Observations on Pestilential Cholera (Aphyxia Pestilenta) as it appeared in Sunderland. By WM. AINSWORTH, M. R. C. S. 8vo. pp. 172. London, 1831. — Ebers and Co.

The Laws and Progress of Epidemic Cholera, illustrated by Facts and Observations. By T. HANCOCK, M. D. 8vo. pp. 118. London, 1832.

Letters upon Cholera Morbus, with Observations upon Contagion, Quarantine, and Disinfecting Fumigations. By WM. FERGUSON, M. D. 8vo. pp. 39. London, 1832. — Highley.

Letter to Sir David Barry, Member of the Central Board of Health, on the Character and Treatment of Cholera. By C. NEGRI, M. D.

A Letter to the Presidents of the Westminster Medical Society on Cholera. By JOHN WEBSTER, M. D. 8vo. pp. 16. London, 1832.

The Pestilential Cholera Unmasked, and Proofs of its Contagious Nature, &c. By JOHN V. THOMPSON, Esq. F. L. S. 8vo. pp. 64. London, March, 1832. — Renshaw and Rush.

Observations on the Origin and Treatment of Cholera and other Pestilential Diseases, and on the Gaseous Oxyde of Nitrogen, as a Remedy in such Diseases, as also in Cases of Asphyxia. By JOHN HANCOCK, M. D. 8vo. pp. 58. London, 1831. — John Wilson.

Lecture on Cholera and other Pestilential Diseases, delivered at the London Mechanics' Institution. By Sir ANTHONY CARLISLE. 8vo. pp. 22. London, 1832.—B. Steill.

Cholera, as it has recently occurred in the Towns of Newcastle and Gateshead, including Cases illustrative of its Physiology and Pathology, with a view to the establishment of sound Principles of Practice. By T. M. GREENHOW, M. R. C. S. 8vo. pp. 162. London, 1832.—Highley.

THE immense number of works on cholera, which pour in upon us, almost hourly, have compelled us to defer our notices and reviews of other books. The odium medicum seems as violent as the odium theologicum; the contagionists and anti-contagionists are as inveterate as the dogmatists and empirics of antiquity. We cannot attempt to notice even a small proportion of these productions; and must content ourselves and our readers with the expression of our impartial opinion on their respective merits and demerits. The fact is, that the disputants have arrived at the most opposite conclusions. It is now clear to the meanest capacity, that “the awful crisis, the national visitation, the pestilential monster,” has disappeared, and is utterly despised by the sensible part of the public.

It is curious to view, with a cool and dispassionate glance, the numerous writers on cholera,—those who have, and those who have not observed the disease. In no part of the history of epidemics can we discover so great a diversity and discrepancy of opinion. Even those who have observed the Indian disease disagree as to its phenomena, causes, symptoms, and treatment; while those who have studied the epidemic cholera of this country, are equally divided. We need not dwell upon this topic, but shall conclude by observing, that another heterogeneous page is added to the records of medicine.

Mr. Ainsworth's book is one of the

best written upon the subject. The author is an alarmist—a decided contagionist. He gives a graphic description of the symptoms and treatment of the disease; and his work will be perused with interest, both by the medical and the general reader.

Dr. Thomas Hancock is a conditional contagionist, or rather a non-contagionist. He takes a philosophic and truly scientific view of epidemic diseases, and concludes that epidemic cholera is not proved to be contagious, and may be followed by the best results, as the condition of the poor will most probably be improved in consequence of it.

Dr. Fergusson is also a non-contagionist. His production is replete with argument, science, and sound sense.

Dr. Negri maintains that there is a close analogy between cholera and febris intermittens perniciosa of Italy, and that quinine deserves a fair trial. His letter proves him to be a physician of extensive research, of observation and judgment.

Dr. Webster is a non-infectionist, and adduces many unanswerable arguments against the opposite party.

Mr. Thompson is a contagionist, and, of course, approves of segregation, or isolation, as he terms it. Among many other facts, we find that the author is of opinion, the disease may be communicated by domestic animals, dogs, swine, &c. He thinks the disease is improperly called cholera, as the alvine dejections are not bilious; he approves of the term proposed by the venerable Sir Gilbert Blane, namely, colica spasmodica maligna, but prefers the designation, febris pestilens cholericoidea—pestilential choleric fever. He argues that it bears a close resemblance to the pestilential remittent and continued fevers described by Sauvages, Lind, and others. He coincides with Torti, Lortle, Morton, and Negri, who described the tertiana Cholericæ sive dysentericæ. This essay is concluded with an account of the various remedies employed for the cure of the

disease, and with the author's views on the best mode of preventing its progress. It contains a lengthened disquisition on the nature of the epidemic, and a full account of the best mode of treating it.

Dr. John Hancock is one of the staunchest non-contagionists of the day. He gives an enlarged view of epidemic diseases, plague, yellow fever, typhus, cholera, &c.; and, with a mind free from prejudice, and stored with medical erudition, he concludes that these diseases are not contagious. He gives numerous extracts from the works of the most eminent physicians of this and other countries in support of his conclusions. He proposes nitrous oxide as a remedy for cholera, and quotes Sir H. Davy and other distinguished philosophers, as to its vivifying and alexiterial powers, which are more permanent than those produced by any other stimulus. His remarks on the effect of impure air, as productive of disease, are instructive and valuable; they are deduced from the classic, historical, and medical writers of antiquity. His criticism on the various works on the plague, are keen and just; while his proofs of the non-contagiousness of cholera, of the inutility and injury of quarantine, and of the inconsistency of the recommendations of the Central, are unanswerable. We strongly recommend this essay to our readers.

Sir Anthony Carlisle, with that innate modesty which distinguishes him, makes the following announcement in his title page:—"All the statements and predictions of Sir A. Carlisle, in November last, have been completely fulfilled." Is this the puff direct, or puff oblique? The venerable knight must have caught the infection of cholera mania, when the above sentence escaped him; though one who has been so caustically censorious of others, ought, perhaps, to have been somewhat more cautious. A considerable part of his lecture is devoted to a detail of the origin and progress of medicine and surgery; on the causes of dis-

eases, and "on the God-like vocation of healing, on the safe and sure foundation of the exact sciences." Considering the constitution of his auditory, this may be pardoned. He is a [contagionist, of course, and indulges in a few sly cuts at the first Board of Health.

He takes a comprehensive view of epidemic and contagious diseases, and affords a good example of the encroachment of the pure surgeon upon the hallowed and exclusive province of the physician. He discusses the contagions of putrid fever, agues, small-pox, measles, scarlatina, &c.; and thus proves to the College of Physicians, the competency of a pure surgeon to elucidate medical diseases—even sea scurvy has not escaped his notice.

Our author, at length, arrives at the particular subject, which formed the topic of his lecture, and observes, "I do not regard it with all the horrors so injudiciously heaped upon by authority." He takes a most scientific view of contagious diseases; if we except his original notion, that cholera is communicated by the saliva being contaminated, and swallowed. He condemns quarantine, and considers it highly injurious to all classes of society. He forcibly inculcates the necessity of calmness of mind, temperance, wholesome diet, proper clothing, and other hygienic measures. Upon the whole, this lecture is extremely creditable to the author, though many of his conclusions are founded on mere assumptions.

Mr. Greenhow, is a non-contagionist, and fully agrees with us in our views of the disease. He proves from the testimony of Mr. Green, a contagionist, that cholera had appeared within a mile of Sunderland, before a single case had occurred in that town. He is a candid and conscientious writer, who fairly examines every fact adduced by his opponents; and refutes every statement made by them. His production is decidedly one of the best on cholera, and re-

flects great credit on his reputation. It will be perused with great advantage, by all who wish to take an honest and a clear view of the phenomena of the disease in the towns to which it refers. The author confines himself to the progress, diagnostics, pathology, and best mode of treating the English cholera of 1831-32. This work adds much to his professional attainments.

DR. GORDON SMITH ON
INFANTICIDE.

Remarks upon Infanticide, by JOHN GORDON SMITH, M. D., &c.

THERE has appeared in THE TIMES newspaper of this day, a report of one of the most interesting trials for INFANTICIDE which has, for some years, made its appearance. I trust, therefore, that the Editors of the *Medical and Surgical Journal* (who are so fully entitled to the praise of all who may be interested in the advancement of medico-legal science and the improvement of medical evidence) will not reject the observations which the course of this affair has called forth on the part of their correspondent and sincere well-wisher.

It was statute-law (*tempore Jac. I.*) that any female concealing her pregnancy, where the offspring, when born, would have been illegitimate, should be judged to have committed *child murder*!! This law was afterwards much softened; and, for a long course of years, it may be said (judicially) that no case of INFANTICIDE occurred—excepting under unusual circumstances, both of accusation and professional proof.

The existing law stands nearly thus: the *intent*, according to the act of Lord Ellenborough (47. Geo. III.), and as revised by Mr. Secretary Peel (9. Geo. IV.), dooms the female, upon whom the crime of *child murder* may not be *proved*, to two years' imprisonment, for concealing the birth

of a child, which, if born alive, would be a bastard.

We have, of late, generally found that judges and juries lean to the side of conviction upon the *minor* offence; and the fate of almost every PROLICIDE has been a two years' imprisonment, instead of a capital condemnation; with what benefit either to public or particular morals and repute, it is not for me to say. But I wish to impress upon the minds of professional men this important fact that, whether the culprit be hanged or imprisoned—whether the judge or the jurymen decide *pro or con*, the fiat depends upon the dicta of the medical witness, and this I conceive to be *awful responsibility*!!

I could cite *several*—aye, even *many* cases of deliberate and premeditated INFANTICIDE, and many more of PROLICIDE, on the part of the mother, where professional testimony has been refused, and even *quashed*! I have even in my possession some written complaints upon this very subject. I have been consulted concerning it over and over; and I have never given an advice or opinion to a correspondent which led him, in the slightest degree, into a dilemma.

Having offered these preliminary observations, I shall proceed to facts; and desire, in so doing, to be guided by the report I have read in the newspaper which is most celebrated for accuracy in these matters.

At the assizes held in *Exeter*, on Friday, March 23, 1832, "*Mary Kellaway* was indicted for the wilful murder of her new-born female child, by fixing a piece of tape round its neck."

Prisoner had been suspected to be in the family way; and on a certain night she rose from her bed repeatedly, and was absent from it upon one occasion a considerable time, for which, as well as on account of certain appearances, which could not be concealed, she pleaded insufficient excuses to a female bed-fellow, who was a married woman.

The following is a brief outline of

the *circumstantial* evidence upon the trial, which I think it my duty to introduce, because, 1st, the nature and bearing of circumstantial evidence is not in general understood by *ex-legal* men; 2nd, because the perusal thereof may assist young medical practitioners in dealing with similar cases; and, 3rd, because I think the *circumstantial* is fully borne out by the *medical* testimony, as will hereafter be seen.

The prisoner slept in the room with another (a married) woman: she left her bed repeatedly in the course of a certain night; she said that some spots of blood upon the floor, were merely *spilt water*; these spots, however, she was observed to be busy in attempting to wash out. Her companion thereupon insinuated that something was wrong. Bloody sheets were changed for clean; in short, from appearances and other circumstances, the women around the prisoner decided that she had had a child. The prisoner, in the most solemn manner, and with a most awful appeal to *God*, declared that the accusation was *false*.*

The body of the infant, however, was found by one of the women, wrapped in a flannel quilt.

* * * * *

The woman who discovered the corpse of the infant, having attempted to divide the umbilicus with a pair of scissors, the prisoner snatched them from her; upon which it was concluded, on the part of the by-standers

* A female (unmarried) was taken suddenly ill. A medical man came to her aid, and declared her to be in labour. "Me in labour! How dare you throw out such an insinuation? My character is too well known," &c.

"Character or no character," said the accoucheur, "you are unquestionably in labour; and things are going on as they should do."

In a short time, a thumping boy was extruded from the maternals, and held up by the man-midwife as a convincing proof. "Do you believe me *now*?" said he, in triumph. "No;" you unprincipled fellow, you have brought that bastard of your's here to ruin my reputation," &c. &c.

(*females*.) that she had destroyed the child with these scissors.

* * From the evidence of the female witnesses, it does not appear that she concealed the circumstance of her pregnancy,—LET THIS BE NOTED.

It was farther given in evidence, that the scissors were seized by the prisoner for the purpose of detaching a string which was tied round the infant's *neck*; and this fact was positively *sworn to*.

I proceed now to quote at large from 'THE TIMES,' the most important part of the evidence; and having done so, shall conclude with a monitory remark or two to my juniors.* I have been so successful in imparting correct ideas of the duties of medical men (under such circumstances), that I almost identify myself with the witness whose testimony, as given in this *day's paper*, I now propose to repeat.

W. P. Mole has been in practice as a surgeon for two years * * was called in; * * a female child was warm, but this warmth might have proceeded from washing; the face and neck were nearly black; round the neck there was an indented mark; the mouth was open, and the tongue slightly protruding; * * prisoner had been recently delivered.

In the presence of several other medical men, examined the body; * * (witness describes appearances about the neck, which we do not think it requisite to quote). "The hands were somewhat clenched, and the thumbs turned down upon the palms; the navel string I found to be tied in a proper manner. The body weighed rather more than seven pounds and a half, and was perfectly well formed * * *

I examined the heart and *lungs*. * * The lungs were red. * * On cutting into their substance, air escaped in great abundance. On squeezing them, a peculiar crackling feel was remarkable. A portion being placed in water, floated with great buoyancy;

* In a future paper.

and the air could not be sufficiently forced out to make it sink. * *

In the heart, the *foramen ovale* (wrong described, however,) was open; the ductus communicus was collapsed; though, according to newspaper-report, the terms are almost ridiculous."*

The result of the evidence was the conviction of the woman, who was accordingly sentenced to a murderer's fate.

I shall furnish another paper on this case, if the present one be published.

Medico-Botanical Society.

March 27th.

EARL STANHOPE in the Chair.

AFTER reading the minutes,—

Mr. Gilbert Burnett delivered a lecture on botanical geography and topography: he dwelt on the advantages of its study to the medical man, by pointing out the healthiness and insalubrity of localities, by the plants growing in those places. He also spoke of the different regions to which certain classes were confined; and illustrated the whole by diagrams and examples. He stated that three great causes tended to prevent the migration of plants; 1st, a large extent of water, such as the Atlantic; 2ndly, very high mountains; and, 3dly, immense sandy plains, on which plants could find no support.

The thanks of the society were returned to the lecturer, and it was then announced that the Professor of Toxicology would deliver a lecture on *hydrocyanic acid and its compounds*, at the next meeting.

* It is an old doctrine of mine, that newspaper reports are not documents; so that if I have misrepresented Mr. Mole, he has [only] to communicate to me the real truth of his testimony.

London Medical & Surgical Journal.

London, Saturday, March 24, 1832.

TO OUR READERS.

IN reply to the communications of our numerous friends, we beg to state, that this Journal has obtained a degree of patronage, and an extent of circulation, never possessed by any periodical hitherto published in this country. It has been most favourably received both by the profession and the public. Its principles are those of independence, impartiality, and the promotion and defence of the interests of all classes of the profession. These principles have induced many of the most eminent professors, lecturers, and authors, both of London and elsewhere, to co-operate with us in the execution of this work. We do not advocate the cause of faction, or of party, but of every member of the profession. The object of this periodical is to communicate the fullest account of the progress of medicine in all countries. In performing this pleasing task, we are sometimes impeded by being compelled to animadvert upon individual opinions, and, occasionally, to appear personal. But we totally disclaim all predilections, and all feelings of hostility, which might induce us to depart from that plain and straightforward path which is indicated by justice, duty, and conscience. A journal conducted upon such principles could not fail to be supported by the profession. Our success has

been unprecedented; a very large impression of our work has been rapidly disposed of, and the demand for it is so incessant, that the first six numbers are now being re-printed. We deem it right to give this account of our principles, and progress, as new subscribers are daily added to our numbers; and as some few of our correspondents seem to doubt our success, and determination to continue this periodical on the unusually low terms on which it is published. We assure our readers, that there is no possibility of our increasing the price of this work, as the present circulation more than covers the current expenses. Many rumours unfavourable to this periodical are sedulously circulated by booksellers, who ought to be above such conduct; but such hostility is puerile, to say the least of it; and has the effect of stimulating us to redouble our exertions, and to overcome every difficulty we may have to encounter. This opposition convinces us of our importance, and proves to us that our periodical must succeed, even beyond our most sanguine expectations. It could not be otherwise, as we are assisted by a galaxy of medical talent never before exerted in any of our periodicals; and moreover, as we supply a mass of useful and deeply instructive matter, on terms, unequalled in the history of periodical journalism, for their moderation. There is no member of the profession, no student, however limited his means, who cannot expend sixpence a week in procuring a fund of information; for which he will pos-

sess a chronicle of the latest medical literature, and a portion of the new French Dictionary of Practical Medicine and Surgery, now in course of publication. No other medical journal offers such advantages.

The names of the professors and lecturers, whose valuable contributions have already enriched our pages, are sufficient guarantee for the superior claims this Journal possesses over its contemporaries. We refer to our prospectus for ample proof, that our sources of information and support, are unequalled. We are compelled to make these declarations, in consequence of the base attempts made by our rivals against us; and this is our apology for that, which might otherwise appear egotistical. It is also necessary to mention that, arrangements have been effected, which will prevent the appearance of typographical errors in future. We need scarcely state, that our pages are open to every scientific cultivator of medicine.

As there are several conductors or editors of this work, our respected colleague, whose name is avowed, cannot be held responsible for all the articles. He agrees with us in opinion, that no journal can be independent, whose editor is considered the author of every article which appears. In fact, no critic can be impartial, who is in friendly intercourse with his professional brethren, and this fact induced us, to enter into the arrangement, on which this Journal is conducted. Some of our best friends caution us, to avoid personalities, "to attack

measures and not men;" while others, remind us of the declaration of Junius, that we must "attack men and not measures." Some point to our contemporaries as the bane and antidote; and others, urge us to be strictly scientific, and to avoid all the ephemeral squabbles. These, point to Scylla and Charybdis, and warn us to steer clear from those seductive allurements, which have led both our hebdomedal contemporaries into the most perilous situations. Some, accuse us of being too spirited, others, of being too dull. These conflicting opinions would be highly embarrassing to us, had we not long since learned, the utter impossibility of pleasing all parties. We have determined to pursue a middle course, and to avoid the glaring faults of our contemporaries. By the adoption of this plan, we have secured the approbation of a large proportion of the profession; and therefore, we shall not abandon it to please any party. Nevertheless, we feel deeply indebted to our friends, for their well meant suggestions, but they must accept our apology for not acting upon them. It may, perhaps be expected, that before we conclude these remarks, we should notice the line of conduct, we shall pursue towards our worthy contemporaries. With all these, we desire to stand on good terms; but if any one of them shall think proper to attack us without provocation, he shall not do so with impunity. It will be often observable, that our criticisms of works will differ widely from those of others.

We state, in explanation, that truth, justice, and impartiality, shall guide our decisions. We are convinced that the opposite motives to these, with the illiberality and ignorance of modern reviewers, have done much to check the buds of genius in this part of the kingdom. We quote the language of an elegant modern author, who says, "the qualification of a reviewer, is that of a cold-blooded assassin, who will neither scruple to use the tools of a butcher, nor the language of a Billingsgate." Some of our sharpest critics choose themselves into office; and happening to set out without knowledge, talents, taste, or judgment, pronounce decisively upon the merit or demerit of all works whatsoever.

A man must serve his time to ev'ry trade
 Save censure; critics are already made;
 Take hackneyed jokes from MILLER, got
 by rote,
 With just enough of learning to misquote;
 A mind well skilled to find or forge a
 fault,
 A turn for punning—call it attic salt.

These writers care little for feelings, and condemn a work that cost the author much labour, research, and observation. Such critics are "hated, yet caressed."

While these are censors, 'twould be sin to spare;
 While such are critics, why should I (we)
 forbear.

So saith the immortal Byron. Inflexible justice will always guide us in our reviews, and we shall feel much more satisfaction in praising than in censuring the productions of our brethren.

PROGRESS OF CHOLERA.

THE 'disease, mis-named cholera, is as yet, confined to the poor, who reside in low and filthy situations; and is decidedly on the decline. The occupation of the alarmists is gone. There is scarcely a contagionist, unless connected with the Central or other Boards of Health. It is really surprising to listen, to the exaggerated statements of this party. We have heard their arguments with deep regret, as we did not think it possible, any men, with the slightest pretention to erudition, could be so infatuated as to maintain, that epidemic cholera, or rather, malignant spasmodic colic, is communicable from one person to another. Had not the Government taken up the matter, and appointed Boards of Health, we should have heard nothing of the contagiousness of this disease. A genial season has nearly put an end to it already: the tendency to diarrhoea has very much diminished, and we venture to predict, that ere one short month, the labours of our Boards of Health will have ceased. The alarm is, however, still fostered by the Government; for we observe in the *Gazette* an order to all captains to hoist a yellow flag, when any one on board has died of cholera. In many of the parishes throughout London, there is the most decided opposition to the establishment of Boards of Health. In some, the Privy Council has commanded the organization of Boards, according to the authority invested in that body

by the cholera humbug act, and fleeced the inhabitants of large sums, *nolens volens*. This and other tyrannical proceedings are properly ascribed to the Central Board of Health, or rather to the profession generally; and, consequently, the greatest contempt is entertained towards the alarmists of the faculty.

We hope and trust that circumstances may speedily occur which will lead to the dissolution of this obnoxious junto in Whitehall Place, who have effected so much mischief, both to the profession and the public. We are heartily sick at the proceedings of these worthies, and we sincerely wish, that we need never refer to them again.

The "grand total," as the worthy Board have it, of cholera cases, in this kingdom, to March 28, is 6,995—the deaths, 2,258. From all that has transpired, we believe there are few of our profession who place any confidence in the authenticity of this report. Numerous facts have shewn, that many diseases were reported by the Board as cholera, which never happened, and many others which were wholly dissimilar to the disease. We state this, as our esteemed contemporaries, in foreign countries, will be quoting the statements of this Journal as authority, and, therefore, we wish to give a fair view of the matter under consideration. Cases have been reported by the Board as having occurred in certain districts, which were denied by the resident surgeons of such places. We need only refer to the public press for

ample attestations of the correctness of our opinions.

During the week, a woman was sent to a cholera hospital, who, a few minutes after her arrival, was delivered of a healthy infant! We have also been informed of a case of sciatica, which was reported to a local Board as a splendid example of blue cholera. These and many similar facts must convince our foreign readers of the degree of confidence which is to be placed in the official reports of our Boards of Health.

In another part of this Journal will be found the Address of the Association of Physicians and Surgeons, who being dissatisfied with the official Boards, have generously undertaken to investigate the nature and character of the prevailing epidemic. It will be seen by this Address, that truth is the sole object of this Association. We therefore call upon the profession to join this body, and to remove that disgrace inflicted upon every class of medical men, by the Central Board of Health.

*Members of the Royal Colleges of Surgeons
New Surgical Appointment.*

AN order has issued in the London Gazette, March 28, commanding all captains of vessels, bound for the continent or islands of North America, who have fifty passengers on board, to have a surgeon, who must be a member of the Royal Colleges of Surgeons of London, Dublin, Edinburgh, or of the Faculty of Physic and Surgery of Glasgow; and he is to report the state of health of the passengers, at any British port, at which the vessel touches. The cholera has done this good for young surgeons.

ABUSES IN ST. BARTHOLOMEW'S
HOSPITAL.

*To the Editors of the London Medical and
Surgical Journal.*

GENTLEMEN,

A regulation, nearly to the following effect, is hung over the table in the operating ward of St. Bartholomew's:—"In order to prevent *interruption* at operations, the area round the table is preserved for the surgeons and the dressers of the operator *only*." This regulation is never adhered to; and, indeed, seems placed there as a mere mockery, for last Saturday it was so crowded, that scarcely one half of the pupils could see what was going on; and after uselessly endeavouring, for some time, to remove the obstructions, by crying out, heads, &c. a slip of paper was sent down, requesting that the above regulation might be attended to; when a Dr. Harris, *not*, I believe, a *surgical* pupil, upon having it put into his hands, immediately tore it up, and deliberately scattered the remnants in our faces, as if in utter defiance of our requests and our rights. The pupils are not the only parties inconvenienced. The surgeon is inconvenienced; and last, though not least, the poor patient. Should any thing occur during an operation, not exactly looked for, or expected, or should the surgeon ask for any instrument or thing not in the hands of the house surgeon, great *interruption* must of necessity occur, and much time must necessarily be lost before the operator can be supplied with what he required to carry on the operation, owing to the assembled M.D.'s and pures, closely huddled together, peeping over one another's shoulders, standing between the operator and the table upon which the instruments are placed, so that the house surgeon has to wade backwards and forwards through them. Should the above remarks be worthy a corner in your Journal, you will, by inserting them, greatly oblige

ONE OF THE INCOMMODED,

MEDICAL INTELLIGENCE.

DR. BULLER, of Hamburgh, is said to have invented a surgical instrument, with which a diseased leg may be amputated in less than a second. The pressure exercised so completely benumbs the part, that the patient suffers little or no pain under the operation.

BOOKS.

A Treatise on the Physiology and Pathology of the Ear; containing a comparative View of its Structure, Functions, and various Diseases. Fifth edition, with considerable additions and improvements. By John Harrison Curtis, Esq. London: Longman, Rees, Orme, Brown, and Green; 1831.

Observations on the Origin and Treatment of Cholera and other Pestilential Diseases, and on the Gaseous Oxyde of Nitrogen, as a Remedy in such Diseases, as also in Cases of Asphyxia. By John Hancock, M. D. 8vo. pp. 58. London, 1831.—John Wilson.

Lectures (delivered at the Mechanics' Institution, 19th Dec. 1831, and 13th Feb. 1832,) on Carbon, Oxygen, and Vitality, the three great Agents in the Physical Character of Man; with Remarks on Asiatic Cholera. By Geo. Rees, M. D. Member of the Royal College of Physicians of London, &c. 8vo. pp. 107. London, 1832.—Highley and Hookman.

NOTICES TO CORRESPONDENTS.

COMMUNICATIONS have been received from Dr. Gordon Smith; Mr. Aldis, of Cambridge; a Georgian; J. O. E.; L. M. G.; Delta; T. B.; Crito; Edinensis; Guyensis; Mr. Forbes Winslow; J. A. P. and others.

Dr. Hood.—The great length of Dr. Hood's paper, and also the impossibility of dividing it, obliges us once more to defer its publication. We shall insert it in our next.

A Georgian.—We highly approve of the real independence of our able correspondent. His suggestions will be attended to.

J. O. E.—The letter signed with these initials would lead to a controversy, for which we have no space.

L. M. G.—A minor cannot bind himself as an apprentice. His guardian, executor, or nearest relative or friend, must do so, to render the indenture a legal instrument.

Delta.—Want of space prevents us from inserting the able letter of our correspondent.

T. B.—We are much obliged for this letter. It is evidently written by an unknown friend, though we think he is hypercritical. He ought to recollect, that the articles in the French Dictionary of Practical Medicine and Surgery, are written by different individuals. Some of these writers speak in the first person singular, others in the first person plural, and more in the third person singular. The translator is bound to follow the text; and cannot be fairly responsible for the composition or

style of others. When he modified both, other friends complained, and argued, that they wanted the French and not the British opinions. The objections raised by our correspondent prove him to possess good taste, and a perfect knowledge of literary composition.

Crito.—The hint will be attended to on a favorable opportunity.

Guyensis.—The insolence of an hospital menial to the physicians, surgeons, and pupils of Guy's Hospital, is quite intolerable; and is a disgrace to the ruling powers of the institution. On a late occasion, a poor man recovering from delirium tremens, who was under the care of Dr. Bright, was, contrary to the directions of the physician, and of his clerk, strapped to the bed, at the suggestion of one of the nurses. Can Mr. Harrison, the treasurer of the Hospital be aware of conduct like this?

Mr. Winslow's request will be complied with.

A Student of the Middlesex Hospital complains, in no measured terms, of the haughty behaviour of one of the surgeons, who, in addressing a dresser or a student, employs such courteous language as this—"a pen," "a probe," &c.; and, having done with either, flings it from him on the next bed with the greatest indifference, as if the owner was beneath his notice. This is one way of "teaching the young idea how to shoot."

All communications must be post paid, or they will be refused. This is the rule of all periodicals. During the last week we have declined to receive several unpaid letters and parcels; and this will explain our silence on many matters to which these have referred. It is right to state that these were from unknown or anonymous correspondents. The communications of our regular contributors and reporters, will be received in the manner agreed on. We beg also to observe, that all communications intended for insertion in the current number, must be forwarded before Wednesday evening, as our last sheet is ready for press in the afternoon of Thursday. The large impression necessary for our circulation, and required on Friday at noon, compels us to adopt this course, and on no account can we impede it. We beg of our numerous friends and contributors to take the trouble of attending to calligraphy, as illegible manuscripts are productive of great inconvenience and expense, and often tempt us to submit them to a fiery ordeal. If writers expect to see their productions in this journal, they must attend to this hint.

J. A. P. This letter is a forgery.

A pupil. Students who entered to Lectures in October 1831, will be examined at the Hall, in the first and third books of Celsus, and tenth chapter of Gregory. We think such students may enter to physicians' practice, during the next summer, but from the usual bungling and stupidity of the regulations of the Hall, we cannot form a positive opinion on this point.

London Medical and Surgical Journal.

No. 10.

SATURDAY, APRIL 7, 1832.

VOL. I.

Royal College of Surgeons.

LECTURES

ON THE

ANATOMY AND DISEASES OF THE EYE.

DELIVERED BY

G. J. GUTHRIE, Esq., F.R.S., V.P.R.C.S.

Lecture the Ninth.

MR. PRESIDENT,

I SHALL now proceed to the subject of gonorrhœal ophthalmia, merely remarking, that it is necessary to bear in mind, that there are two kinds, essentially distinct, frequently accompanying gonorrhœa. One of these inflammations is attended with great purulent discharge, and resembles the two last which I have described; it comes on rapidly, and sometimes runs its course in 36 or 48 hours. The patient suffers great pain; there is an abundant discharge, and chemosis soon succeeds, surrounding the cornea, rising at its edges, and forming the cup already mentioned. The history of all cases of this disease, hitherto recorded, is but a melancholy story of lost eyes—four out of five are most frequently lost; or if not entirely lost, at least partially disfigured. I am speaking of the cases mentioned by my predecessors, and not by my contemporaries, as I have no wish to interfere with them. The reason of this loss is, that they all pursued a similar plan of treatment; viz. they invariably bled the patient to a very large quantity, 100, 150, and even 200 ounces, are stated as having been drawn, until the patients were blanched as white as a sheet, or a piece of white wax. This was accompanied by a due proportion of purgatives, emetics, and emollient fomentations, with the intervention of a mild astringent lotion and leeches, until in time the eye or eyes were lost, and the case was brought to a conclusion. As long as I followed this course I fared no better than those around

me, but successive failures led me at last, almost in despair, to adopt a very opposite method, which has proved, at least in my hands, much more effective, and will, I trust, in those of others, remove the opprobrium which has been attached to this part of surgery. I shall not detail the symptoms further, as they resemble those of the inflammations previously described, but shall proceed to examine the causes to which the occurrence of the disease is attributed. It is called gonorrhœal, and I have distinctly stated it to be purulent. It is supposed to arise in three different ways; and the first is, by positive contact of matter from the urethra, and there is little doubt but that it can be communicated in this way. It is quite certain that both leucorrhœa and gonorrhœa can give rise to this complaint, but it is surprising that it occurs so rarely among the great number of people who suffer from gonorrhœa. It has been said, that women do not suffer so much from this disease as men, but this is a mistake. I have seen many women labouring under it. Of the five last cases which presented themselves with it to me, three were women, and one of them had lost both eyes by sloughing of the cornea before I saw her. I shall lay it down then as a rule, that women are as subject to this disease as men. I shall likewise lay it down as a principle, that the contact of urethral discharge will produce this disease; but the matter may be applied without causing the disease, which I can only explain by the fact, that persons may be exposed to the virus of small-pox, or the venereal disease, and yet not take it. It has also been supposed, that an individual cannot have his eye affected by matter from his own urethra; there may be something in this, but I can give no proof of it, as I have not tried it; indeed no one likes to try such experiments, unless the days for experimenting on criminals were to come round again, and even then it would serve no useful purpose. The second way by which it is said the disease may be communicated is, by the medium of the atmosphere; and I believe that almost

all inflammations are communicable in that way, especially when people are aggregated in great numbers. It is not certain whether the disease is really gonorrhœal or not; it may be merely the common purulent inflammation; for we cannot distinguish a gonorrhœal inflammation from the common purulent one, otherwise than by the history; the pain, discharge, and appearances are alike, and it is only from the fact that the patient has recently had, or still has a gonorrhœa, that we are warranted in calling it gonorrhœal. It has been supposed that when the disease comes on, the gonorrhœa ceases, which certainly has not been the case in the instances which I have seen. On this supposition, stimulating applications to the urethra, to bring back the discharge, have been employed, and much extolled by Beer and others. I have never seen them useful, nor do I believe that they are so, or that the discharge in general ceases. It has been said to arise from a peculiar state of the constitution. Now, I believe that those who assert this, have not made due distinction between the two kinds of disease; the one being marked by purulent discharge, the other having different characters, without purulent discharge, and requiring a very different treatment.

In regard to the treatment, we must proceed as pointed out in my last lecture. If we believe it to arise from metastasis from the urethra to the eye, it is a constitutional disease, and will require constitutional treatment to check it, but I do not believe it. I think that the disease is primarily *local*, and that the constitution is affected only secondarily. The plan of treatment then will be founded on this opinion, and you apply the ointment I spoke of in my last lecture, and take away a moderate quantity of blood. In order to cure this inflammation with purulent discharge, we must alter the action in the extreme vessels. We must not be alarmed either by the chemosis, extreme pain, or the height of the inflammation, provided it has gone no further; I believe that the ointment is more adapted to this case than any other. I shall read to you parts of the last case of gonorrhœal ophthalmia that was treated at the Royal Westminster Ophthalmic Hospital, which will amply illustrate its beneficial effects:—

[Mr. Guthrie then narrated a case from the hospital case-book, which will be found in another part of the Journal; Mr. Foote, jun. having extracted the case from the hospital record.]

You will perceive that it here produced a positive and direct effect on the conjunctiva and eye-ball. I do not mean to say that one application will alter the action, and restore the parts to a healthy state, it must be re-applied; neither is the ointment to do every thing; it may and must of course occasionally fail. If the chemosis is at all great, and the cup is formed around the cornea, and

this latter opake, we must not expect to cure it; but this I will say, that if this plan does not succeed, no other kind of treatment that I know of will. I should not, however, hesitate to apply it in such a case, for although more alteration has taken place than the eye can recover from, yet it may prevent its going further. There is a remarkable fact connected with this complaint, which is, that when once the cornea yields, the pain subsides considerably, and the patient becomes comparatively easy. The eye is also to be continually cleaned, either with a weak solution of alum, or of corrosive sublimate; this latter, which is No. 9, in the pharmacopœia of the Ophthalmic Hospital, is a solution of a grain to the half-pint, the former, half a drachm to a pint. It is requisite you should know how to use these lotions, for no advantage is derived from dabbing the outside of the eye-lid with it, they must be syringed into it. If you wish to go natively to work, you will take a syringe, which is a little curved at the point, and introduce it under the upper eye-lid, holding them together, so that you can inject them full, when by letting them go suddenly, the discharge, which has been coagulated by the alum, will come out with the injection. This is the neatest way of proceeding. You must likewise prevent the lids adhering at night, by the application of some mild ointment which does not stimulate; you should take away some twenty ounces of blood, and oftentimes that is all that will be necessary; you will of course purge freely, and you may give colchicum; opium is to be applied to the fore-head, and cold lotions to the eye-lids, but if they are inconvenient to the patient, opiate solutions are alone to be had recourse to. If ulceration of the cornea is impending, calomel and opium every two or four hours, with the ung. arg. nitr. and occasional cupping or bleeding.

The other kind of ophthalmia attending on gonorrhœa, is almost as rapid, and equally as destructive, if not properly treated; it requires a very different treatment from that last described. It happens to particular individuals, and when it has occurred once, it generally does so, a second and a third time. The history of a case will serve to detail the symptoms. A person has had a gonorrhœa for eight or ten days, when, without any known cause, he finds one or both of his eyes inflamed, and at the same time he often experiences uneasiness in some one or more of the joints; generally inflammation of the synovial membranes of the knees takes place; but I shall confine myself chiefly to the eyes. These are inflamed; there is a great flow of tears; on everting the lower eyelid, it appears of a dark red colour, with perhaps a little muco-purulent matter in the folds of the conjunctiva; the disease extends; the vessels of the conjunctiva become large, loaded, and reticulated; a kind of chemosis takes

place, very different from that already described; it is a regular thickening of the conjunctiva, which has a fleshy appearance, instead of seeming raised from the sclerotica by the intervention of a fluid. It is therefore essentially distinct from the chemosis of purulent inflammations.

This peculiar inflammation is very much disposed to affect the internal parts, without going further externally. The iris is changed in colour, but is seldom inflamed; it is more generally the sclerotic and choroid coats which are affected. Lymph is rarely thrown out on the anterior surface of the iris, when it does become inflamed in this affection; if it is thrown out, it takes place between the posterior surface and the capsule; there is a circum-orbital pain, which is increasing, excessive, very excruciating at night, extending in the course of the ophthalmic branch of the fifth pair, on the side of the nose, and over the malar bone.

If the disease is not arrested, it leads to the disorganization of the eye; effusion takes place on the choroid coat, and retina, adhesions form between the iris and the lens, which become cataractous, and the vessels of the choroid become enlarged and varicose, bulging out the sclerotica, giving it a peculiar blue appearance. It rarely proceeds to sloughing of the cornea; it may, however, to ulceration. Whilst this is going on, one or more of the joints become inflamed, and effusion into the cavity takes place.

We say that this disease is caused by gonorrhœa, because it occurs always in the same individual, whenever he gets a clap; it is probably owing to something peculiar in his constitution.

The disease may shew itself in a milder form than that I have described.

Treatment.—It must be treated severely; we must draw blood, and that largely, to stop the inflammation going on to the internal parts of the eye; in fact, it must be treated like the common idiopathic inflammation. I rely very much on colchicum—a drachm of the wine of the roots should be given every two hours, until four doses have been taken, and then repeated occasionally, if necessary, until your patient is completely subdued by it. In a case that I had lately under my care, I bled the patient several times to syncope, and gave him colchicum until he was almost dead, and then was obliged to administer calomel and opium to complete the cure.

The affection of the synovial membranes will generally yield to that treatment which cures the eye; I seldom, if ever, apply leeches to them, or draw blood by cupping; they generally increase the pain. The joints may be fomented with opiate lotions—this, with the subsequent application of the emplastrum hydrargyri, and the internal use of the decoction sarsaparillæ, for some weeks, is generally sufficient. This severe treatment is

not, however, necessary for every case; and have also used the turpentine with great advantage. I wish now, Sir, to speak of another purulent inflammation, that which affects infants.

Purulent ophthalmia of new-born infants.—

Children are very subject to an inflammation of a purulent kind, which is very destructive to their eyes. I generally see about twenty children every year at the Ophthalmic Hospital, who have lost their eyes, and these eyes are lost through the ignorance either of the mother, the nurse, or the doctor, or all three, and might have been saved by very simple treatment. It always arises from leucorrhœa; I never dispute with ladies whether it is leucorrhœa or gonorrhœa. It appears that, as the child passes into the world, it comes with its eyes partly open, and some of the discharge gets in.

In two or three days after birth inflammation sets in, and the mother's milk is thought to be the best thing that can be applied, by the nurse—(*A laugh.*) The lids swell, and are discoloured, and there is a great discharge—and then the doctor is called in. He does not approve of the mother's milk, and orders conserve of roses to be applied—(*A laugh.*) At the end of a fortnight the child is very ill, is rapidly emaciating, and then other advice is thought necessary; and thus the child is presented to you. It is a disease that any mild astringent will cure; a halfpennyworth of alum will be quite sufficient. It is to be used as an injection every hour or two, from one scruple to half a drachm to the 8 ounces. The fluid secreted at first is thin and watery, and generally becomes purulent about the fifth or sixth day. The eyelids are considerably swollen, and it is very difficult to open them: there is, however, a way of doing it, and it is necessary that you should become acquainted with it. You should place the child's head between your knees, and wipe its eye dry, and your finger likewise. It is necessary that your nail should be of a tolerable length, and round, so that those gentlemen who intend to practice this method, must not bite their nails.

You will draw on the upper eyelid until you see its edge, then passing the end of the nail of the forefinger under the edge, you will draw back the eyelid under the superciliary ridge, which can be readily done in infants, and you may then draw down the lower eyelid; if you attempt it before, you will not be able to open the eye at all, as the contraction at the angles will prevent you. Having done this, you must squirt in the lotion, but I do not always depend upon this alone, but having cleaned out the discharge, I apply the ointment of argentum nitratum with a brush all over the inside of the lids. The child roars and screams, but is soon relieved, and appears easier. If it is a strong child, and there is great inflammation, I always apply a leech, one to each side, some-

times two; I rarely employ any other treatment, except opening the bowels; and very rarely scarify the lids, or apply blisters, which in infants are always dangerous. At the end of a few days, we can change the ointment for the solution, 4 grs. to the ounce. If the disease is allowed to go on unchecked, the eye is generally destroyed; should, however, the cornea be only muddy, we may expect to effect a cure. If the eyes are not disorganized, you may expect to cure 38 or 39 out of 40 by this plan of treatment. The cornea of an infant will recover its transparency, when that of an adult affected to the same extent, cannot. Even when ulceration has taken place, we may hope to arrest it, before it eats through the various laminae, which I have said already are much more loosely united than in the adult. I have, however, seen the cornea slough largely, and the disease, when by accident it is communicated to the nurse, proves a very destructive purulent inflammation. In one very particular case, both eyes of the nurse were lost, before the cornea of the child, from whom she caught it, were affected. This case it was which led me to adopt the treatment by the *argementum nitratum* in ointment, the most vigorous measures having appeared, indeed were proved to be, of no use whatever, in even arresting its progress, after the inflammation had fairly commenced, and chemosis was established.

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,

During the Session of 1831-32;

BY BARON DUPUYTREN,
PRINCIPAL SURGEON OF THAT HOSPITAL.

Effects of a Pistol-shot inflicted under the chin.

—Destruction of the greater part of the inferior maxillary bone, of the lower lip, and other soft parts, to the os hyoides, causing a vast opening, through which the saliva escaped.—Projection of a fragment of the inferior maxillary bone on the right side.—Resection of the bone to the mouth.—Formation of an inferior lip.—Reunion of the wound by twisted suture.

GUN-SHOT wounds have long claimed the especial attention of surgeons, as they may induce fractures, division of vessels, viscera, &c. Wounds of the head caused by suicides, merit particular attention. We could here recite the details of a curious case, were we not interdicted to exceed the surgical domain of the Hotel-Dieu of Paris. The case which

we now relate is remarkable. A soldier, aged 36, entered the Hotel-Dieu, March 23, 1831, to be treated for a frightful deformity, situated under the lower jaw. This man having been refused promotion in his regiment, placed a pistol, loaded with two balls, under the chin, and fired it off, which fractured the inferior maxillary bone in several places. This destruction extended from the right canine tooth to the branch on the left side; the lower jaw, except about half an inch, and all the soft parts that covered the chin, so far as the hyoid bone, disappeared by this explosion. It appeared, by his statement, that he had suffered a great deal, but that cicatrization was complete at the end of two months, though the cicatrices presented a horrible aspect; and he had done nothing to lessen the deformity, or to prevent the escape of the saliva. The deformity was caused by the contraction of the masseter and pterigoidean muscles, which was not counterbalanced by the antagonist muscles; the fragment appertaining to the right branch of the inferior maxillary bone being elevated and projected the lower lip. Such were his symptoms when he presented himself at the hospital, March 23. An enormous hiatus presented itself between the inferior maxillary bone and the os hyoides, which was partly triangular; its superior border formed by the upper lip; its lateral margins converged to the os hyoides; its left border was formed by about an inch and a half of the inferior lip; and its right edge was formed by the soft parts of the jaw and neck; the superior lip was raised by a piece of the lower jaw. What was to be done? Could the portion of the maxillary be preserved, and rendered serviceable to mastication? In order to accomplish this desirable result it should be depressed, and this could not be done without dividing the masseter and pterigoid muscles, and the muscles once divided, how was the jaw to be elevated. This operation promised no good for the patient, and therefore resection of the bone was determined upon; a lip was to be formed, and the whole wound was to be united. How was this resection to be done? By making a transverse incision along the jaw of the right side, by denuding the bone, and by removing it with a saw. The lip of this side could not be made but from the integuments of the jaw, and the wound should be reunited by the twisted suture.

The operation was performed April 16th, as follows:—A transverse incision, an inch and a half long, divided the jaw on the right side, at the union of the superior border of the hiatus with the right lateral border. The maxillary bone was divided and isolated from all parts. The saw was applied behind the second molar tooth, and the bone divided in a few seconds. The lateral edges of the hiatus were incised with a bistoury, the right in its whole length, the left to the point at which there existed a bridle, or band of the

lower lip, which was to be turned to account. The wound in the jaw was united by two points of twisted suture, and the edges were brought into contact by five points of suture. The reunion of the longitudinal wound was perfect, except the lower three-fourths, which had contracted a fibrous texture, which was inextensible. A bandage was therefore applied, with graduated compresses. On the fifth day the threads of the facial sutures came away, and the edges were perfectly adherent. On the eighth day the wound in the neck was cicatrized, unless about an inch in the centre, which corresponded to the fibrous tissue. Straps of adhesive plaster were applied, and graduated compresses placed over them. These measures were continued for a month, and were aided by cauterization of the lips of the wound, and in two months more the cure was complete, except that a small fissure remained, through which the saliva escaped.

It is hoped that this fissure will heal. At all events, the man is cured of that disgusting opening in his throat, which is now replaced by a linear cicatrix, and a new lower lip. During the treatment the man was nourished with milk.

Cataract; its species; Operative proceedings; Treatment.—Eleven patients labouring under cataract have recently been operated on at the Hotel Dieu, by Baron Dupuytren, according to his usual method, which is depression. These afforded ample opportunities for explaining the nature of the disease. This disease is divided into different species. *Simple cataract* consists in an opacity of the crystalline lens. Another species results from opacity of the crystalloid membrane; this is named *membranous*. This is, according to the Professor, to common cataract as one to one and a half. It is very common to infants; is sometimes congenital; and Saunders had observed it twenty-one times in forty-three.

In general it is complete. In adults it usually succeeds blows, contusions, penetrating wounds received on the globe of the eye. It occurs most commonly in scrofulous habits, and after the operation of extraction, without one having had the precaution to displace the capsule. Saunders said it was central, and M. D. maintains the same. It may be congenital, or appear soon after birth. Sometimes we observe a brilliant pearly point situated in the centre of the capsule. This point radiates, or gives off filaments, which approach the circumference of the lens; so that this part retains, in some measure, its transparency, and vision still remains. This variety of cataract is always accompanied with a convulsive movement of the eyes, which revolve on their axis so as to present their transparent parts of the membrane to the light. Sometimes the eyelids and head are affected.

After this variety of cataract, the most common is the *lacteous, pulpy, or soft*. The

crystalline lens is partially or totally softened, or converted into a white, lactescent, opaque fluid. The crystalloid membrane and lens may become incrustated with a greater or less quantity of phosphate of lime, or may become ossified. According to many authors, the cataract may be *black*. This is extremely rare. M. Dupuytren, M. Delpech, and many other eminent surgeons have never seen a case of it. Pelletan and Geraud presented a supposed case to the first, who considered it amaurosis. The others maintained their opinion, and requested M. D. to extract it. He did extract the lens, which were perfectly sound. The operation was not followed by any accident, but the man remained blind from paralysis of the retina.

Many facts, observed at the Hotel Dieu, have conducted M. Dupuytren to the conclusion, that there is an *hereditary disposition* to contract cataract. One report places it beyond doubt.

A woman of 60 years of age and upwards, presented herself at the Hotel Dieu, who had opaque lenses for 18 months. M. D. depressed one cataract, and restored vision; and she remains in possession of that faculty, though she is now at the age of 80.

Her daughter's vision began to be affected at the age of 28 years: she is now led by a guide, and can barely distinguish light from darkness; the pupils are moveable, the eyes are sound. In two years afterwards, the Baron performed the operation for depression with success; and for ten years the vision was not impaired on that side. Encouraged by the success of the former operation, she wished to be relieved from the other cataract. She applied to an advertising oculist, who performed extraction; intense inflammation followed, which was succeeded by opacity, and she lost the eye, while the other remained unaffected in its function.

The daughter of this woman, aged 17 years, had also two cataracts. She was operated upon at the Hotel Dieu, and with equal success. With her, the grandmother conducted another child, in whom the lenses were becoming opaque; so that the grandmother, her daughter, and three children, were all affected with cataract. These cases are remarkable, on account of the disposition of this family to the disease, and on account of the success of Baron Dupuytren. He has also operated upon many congenital cataracts. His observations and remarks upon this form of the disease, cannot be heard without interest. He says, but I ought to observe here, that I have never seen the prodigies of which many authors have spoken, nor understood that persons to whom I have restored vision, could see objects at a distance in their proper form and colour, as stated by metaphysicians and ideologists. I have remarked, almost always, on the contrary, that persons blind from congenital and other cataracts of long duration, habituated to live

with four senses, were generally embarrassed on the restoration of vision; they have had difficulty in combining this action with those of the others, and they have shewn such an inability to employ the function, that I have been many times obliged to deprive them of the use of one or two of the other senses, to enable them to exercise the organ of vision. I have done this in cases of infants; I have had their ears closed, as they were guided by the sound and impressions which they received by the hands; they thrust these before their bodies like tenacula.

But in some cases the professor failed to restore vision by any operation, and in these the optic nerves were diseased in their decussation, or in their origin.

There are three principal methods of destroying cataract, in removing it and its connexions from the visual axis, and allowing the rays of light to fall upon the bottom of the eye; extraction of the opaque parts by an incision of the transparent cornea; the depression or breaking down of these parts by a puncture through the sclerotic; and lastly, keratonyxis, which is the depression of these parts practised from before backwards by the aid of a needle passed through the lucid cornea.

The professor condemns those who prefer any one of these operations, as the kind of cataract can alone guide us in our choice. A cataract of slight density cannot but be displaced, and cannot be broken down, for want of support; then a soft cataract cannot be depressed in a mass, for want of consistence, and it must be cut up or divided. The professor prefers each operation according to circumstances; though in general, he prefers depression to extraction. He rarely has recourse to the last method, and only in certain special cases, in which it is manifested; for example, when the lens and its membrane have undergone such a change, that absorption is impossible. The division is nothing but a modification of depression. It consists in dividing the central part of the lens with a needle, destroying its capsule, and dispersing its fragments in the aqueous humour. He is convinced that it is most rational to employ the different operations in different cases. In surgery as well as in medicine, the same treatment cannot be invariably employed in similar diseases; so in cataract, the age of the subject, certain circumstances which belong to the form, and size of the organ of vision, oblige practitioners to have recourse alternately to the one or the other proceeding. Relative to age, if one has regard to the energy of the absorbent system, he conceives in general, that depression is more proper for infants, and extraction for adults. In the one absorption is rapid; in the other it is slow and defective.

M. Dupuytren has found cataracts unchanged in old persons, who died of other maladies, which were depressed for two years. Again,

children are indocile and unmanageable, and by their movements will increase the difficulties of extraction, and often cause the escape of the vitreous humour. In some old persons the eye is sunk, the orbit projects, and extraction is more difficult. In all ages, in which the movements of the eye are rapid or convulsive, this operation is rendered difficult, and M. D. prefers depression.

The professor proposes modifications of the operation. The needle which he employs is not lanciform like that of the ancients, nor crotchet-shaped like that of Scarpa, but it possesses the characters of both to a certain degree; its blade is strait and elongated, curved on one side, very fine at its point, very sharp on its edges, and the size of its stalk is exactly proportionate to that of the blade, characters which render it equally susceptible to pierce, divide, seize, displace and prevent the escape of the aqueous humour.

This instrument has been adopted by most surgeons, during the last fifteen or twenty years, and is known by the name of its author. In the operation of extraction, M. D. prefers Richter's knife to Defaye's.

Depression is a simple operation, and is performed in the ordinary way; the lens is, according to circumstances depressed entire, divided, or broken up. If the capsule is opaque or black, it is divided and pushed into the anterior chamber of the eye. When the cataract is partially or completely milky, it is also divided and subjected to the aqueous humour in the same chamber. When the cataract is found fluid, M. D. lacerates the capsule, and allows the fluid to escape as before, so as to obscure the eye and prevent him from proceeding with the operation. When the cataract is ossified, it must be manifest that extraction is the only operation which can be employed.

The greatest difficulty in this case or when the lens is black, is the diagnosis. When the colour of the lens is brown or shaded with many luminous reflexions, there can be no doubt, but if it is totally black, it is impossible to decide whether there be or there be not cataract.

In this case M. Dupuytren advises to treat it as amaurosis, and if all remedies fail, to have recourse to the operation. He conceives, that there can be no objection to the operation, whether it prove useless, or be followed by accidents, as no unfavourable result can happen to the patient, because he has equally lost the faculty of vision, whether we operate or not.

About twenty-three years ago, M. Dupuytren was led, by accident, to practise a new operation for cataract. He could not fix the eyes of a young girl, affected with accidental cataracts, and on attempting to introduce the needle through the sclerotic coat, it passed through the transparent cornea, and across the pupil to the lens. He was then ignorant

that this operation was not new, but had been performed in other countries, and above all, that it could be considered a regular operation. Nevertheless, the favour which it received in Germany, and the advantages attributed to it, fixed his ideas upon this method, and he determined to perform the operation of depression, and dividing or cutting up from before backwards, or, in other words, by keratonyxis. After having subjected the patients to the preparatory treatment, he had the superior lid elevated, and he depressed the inferior with the middle finger of the left hand; directing the point of the needle already described, the concavity of it upwards, he pierced the cornea on a level with the inferior part of the pupil, and he facilitated the action of the needle by pushing its convexity with the index finger of the right hand; then he pressed it from above downwards and from before backwards. The cornea being divided, the point of the needle was directed to the anterior chamber through the pupil to the lens. Arrived at this point, he proposed to depress the whole lens at once, which he executed by a rotatory motion of the needle upon its own axis, so that the convexity of the curve was directed upwards, and its point passed between the superior part of the circle which bounds the pupil and the superior part of the lens; he embraced the cataract with the concavity of the instrument, then elevating the handle, and depressing the blade or stalk, he depressed the crystalline lens under the axis of the visual rays. If he wished to divide the cataract, he used the point and edges of the needle, and dispersed the fragments from the axis of the visual rays. The operation having been concluded, the needle was withdrawn in the same course in which it entered; the eye was covered with a bandage, light was excluded from the patient's bed, and low diet, with repose, was ordered. The case was closely watched, and all approach of disease prevented or removed.

Since 1819, the professor has frequently performed this operation on persons of different sexes, constitutions, and circumstances. He considers the comparative advantages or disadvantages of this operation to the other methods. The conclusions at which he has arrived are that—1. Keratonyxis is not, in general, of easier execution than the operation through the sclerotic. 2. That we can operate with the same hand on both eyes, though this is a small advantage to those who, like himself, can operate with equal facility with both hands. Nevertheless, he thinks, under this relation, we should prefer the operation in the opaque cornea; and this circumstance induces him to prefer it, even if it did not offer other inconveniences. 3. The position of the hand and the needle in this operation is not favourable for depression. 4. That the circle which surrounds the pupil prevents the movements of the needle; hin-

ders the easy displacement of the cataract, and its depression into the vitreous humour, and above all from detaching the flaps of the crystalline membrane, which often adhere to the ciliary processes. 5. That keratonyxis does not prevent either the nervous or inflammatory accidents, which also succeed the operation of depression practised through the sclerotic, an observation of the more importance than the pretended innocuity of this manner of operating, which has founded, in a great part, the preference of some German practitioners. 6. That according to reason and experience, this method exposes more to iritis than the ordinary operation, because the iris is more fatigued than in the other manner of operating. That keratonyxis is sometimes followed by opaque cornea, which is either a simple deformity or an obstacle to vision. 8. That the results of the operation of keratonyxis do not differ sensibly from those of the operation through the sclerotic. The following have been the results in twenty-one cases:—

Eleven had an immediate and durable success; six were successful in about a month; two were followed by nervous accidents; five were succeeded by slight ophthalmia; two were followed by iritis; one was succeeded by an inflammation and atrophy of the eye; five had deposited the shreds of the crystalline membrane about the circumference of the pupil; four were followed by a second, and one by a third operation.

One patient lost his eye by inflammation; another lost his sight by opaque cornea; two were affected with amaurosis, independently of the operation.

It is true that the nervous accidents partly disappeared in a few days, by means of antispasmodics and derivatives; and on the other hand, the inflammatory yielded in ten or twelve days to antiphlogistics; and one case of iritis was cured by the latter means, and another by these remedies, with the powder of belladonna, and an operation which detached the membranous pellicles that adhered to the pupil. In fine, in 17 out of 21 cases, vision was restored by keratonyxis, which is a result very little different from the operation through the sclerotic. Nevertheless, the professor concludes that he cannot renounce this operation, and thinks it preferable in certain cases. But the number of favourable cases are well marked; the orbit projects; the opening of the eyelids is straight; the eye is small and depressed; there is an excessive mobility of the organ; and, above all, in the convulsive motions of the eye in certain individuals, and especially in infants affected with congenital cataract, and in those who have the disease in the centre of the crystalline membrane. Constipation, hæmorrhoids, and and diverse cerebral affections, may cause, in a manner more or less indirect, accidents towards the eye, when irritated by the operation. If the patient labours under rheuma-

tism, the eye and its appendages may become highly inflamed, which is caused by a metastasis of the rheumatismal humour, or by irritation. We should first cure the rheumatism, and if we are compelled to operate, we should apply a blister to some part remote from the head. If pulmonary catarrh, cough, or any affection exist, which causes determination of blood to the head, we must fear that a cataract which has been depressed, will regain its position by the agitation of the cough. In affections of the stomach, the shaking or agitation produced by vomiting, will cause determination of blood to the head, or irritation of the eye, and may be induced by the sympathy between this organ and the stomach. If we operate when the stomach is diseased, we must place the patient on a low diet for a long time, which will be accomplished with difficulty in children and old people. Diarrhoea is unfavourable to the performance of the other operations for the removal of cataract. In cases of hæmorrhoids, leeches should be applied to the anus. When the patient is affected with ring-worm or other cutaneous diseases, the operation may cause displacement or metastasis of the irritation, and will not fail to induce some disease of the eye, which will be cured with difficulty. It is not until we have combated all the complications of cataract, that M. Dupuytren decides upon, or advises the operation.

When no complication exists, the patient, before he is subjected to the operation, is prepared by certain means, which the professor never neglects; and which are, perhaps, more necessary than the dexterity of the surgeon. These precautions or preparatory treatment consist in certain baths, enemata, emollient drinks, general or local bleeding, according to the circumstances and constitution of the subject. He administers castor oil occasionally, and when the eye is very mobile, he employs certain manœuvres which resemble the operation. When he determines on performing keratonyxis, he instils into the eye some drops of a solution of belladonna, or of the water of lauro-cerasus, with the intent of dilating the pupil.

The patient having been properly prepared, M. Dupuytren prefers the operation for depression in a great majority of cases. For this method, the patient is placed in bed in the horizontal position, the head being elevated: this position is less favourable for extraction, but offers the advantage in depression of maintaining the eye and the patient in a state of perfect immobility. The professor is convinced, contrary to the opinion of a great number of surgeons, that the choice of the horizontal position contributes much to success.

A disagreeable accident, which occurs when the patient is placed in a chair during the operation, and which M. D. has observed, is syncope. This event embarrasses the surgeon. It continued for a long time in a pa-

tient under the care of M. Husson, to whom the professor was called. In this case the patient was placed in a chair for the operation of extraction, and as soon as the surgeon had divided the cornea, a profound syncope supervened, and prevented the completion of the operation. The crystalline lens remained in its situation; the wound healed, and some months afterwards the operation was performed on the other eye in the same manner. The patient was placed in a chair, as in the first operation; syncope took place, and the operation was concluded, after a long time, with great difficulty. This embarrassing accident would, most probably, have been prevented, or at all events less prolonged, if the patient had been placed in bed.

When the operation is concluded, M. Dupuytren covers the eye with a bandage, and takes the precautions to prevent the access of all luminous rays on the patient's bed, and prescribes absolute repose and a low diet. The age and circumstances, modify his directions in regard to diet. If the patient is of a full habit, he is bled, and every precaution is employed to prevent pain of the head or eyes; the bleeding is repeated, if necessary, pediluvia and enemata are also employed. If vomiting supervenes, which is often the case with infants, he prescribes an anodyne potion, containing syrup of diacodium, and if obstinate, Seltzer water and the potion of Riviere.

In case of agitation and nervous symptoms, enemata with a few drops of laudanum produce the best effects. In conclusion, general bleeding, application of leeches, principally to the anus or inferior extremities, pediluvia, antispasmodics, purgatives, external revulsives, vesicatories, a seton in the neck, are the principal means with which M. Dupuytren combats the accidents, and upon which he insists more or less according to the symptoms.

Contrary to the practice of many celebrated surgeons, when the patient is affected with double cataract, M. Dupuytren never operates but upon one eye at first, and not upon the other, until the first is cured. Experience has shewn him the advantages of this plan, and reason and a knowledge of the physiological laws justify it. In fact, two simultaneous operations produce more serious consequences than one, the inflammation which results, occupying at once, two important organs, and of a particular sensibility, produces the most intense effects which are combated with difficulty. But that which is most worthy of attention, is this, that the inflammation does not offer the same regularity in both eyes; it is much more severe in one eye, which becomes completely disorganised, while the other is but slightly affected. This is observed in all simultaneous inflammations of double organs.

[In the next lecture we shall give Baron Dupuytren's treatment of the different complications of cataract.]

St. Thomas's Hospital.

CLINICAL LECTURE,

Delivered by

FREDERICK TYRRELL, Esq.

March 24th, 1832.

*Diseases of the Kidney, Bladder, Urethra—
Use of Pareira Brava—Erysipelas.*

GENTLEMEN,

THE cases of operations which I spoke to you of at our last meeting, are all going on favourably, excepting the man who had the tumour taken from his thigh, which, I am afraid, will terminate unsuccessfully. If you recollect, I told you before I removed it, that I thought it to be steatomatous, but the operation proved it to be for the most part ligamentous, and I told you I was fearful of his perfect recovery. You also recollect that he had profuse bleeding from the nose after the operation, when it was found necessary to plug the posterior part of the nares. Erysipelatous inflammation set in, which was subsequently followed by large collections of matter; since then he has been troubled with diarrhoea, which has so much reduced him that I am fearful he has but a short time to exist. I likewise mentioned to you in my last lecture, the probability that the little boy who labours under the stone is going on well. The urine, I then told you, was passing partly through the wound, but for the most part through the urethra. The wound has since then healed, and the urine is taking its natural course. I have since admitted several cases into the hospital—amongst them are two with disease of the urinary organs, which I shall speak of in my lecture to-day. The first case was William Croft, aged 39, who was admitted into Abraham's Ward on the 15th of the present month; states that he has been ill for three years—always finds himself worse in the winter than summer. Last summer he experienced little inconvenience, but on the approach of winter he began to be troubled with his complaint. About eight days ago he was attacked with violent pain over the region of the pubes; difficulty of passing his urine, which required great straining efforts of the abdominal muscles, and a desire to pass it frequently; after standing a short time it usually deposited a whitish sediment. Constitutional symptoms had come on—he could not sleep—tongue furred—a disagreeable taste in his mouth—pulse 106—bowels costive—had felt since the period of his last attack, chilliness of the lower extremities, but at present they were of a natural temperature. On examination I found chronic enlargement of the epididymis, and hydrocele on the lower part of the cord.

I ordered him to take thirty drops of the liq. opii. sed., house medicine occasionally, which consists chiefly of senna and salts; to use the tepid bath every other day; and to apply ten leeches over the pubic region, on that side where he experienced most pain. My object then, first, in giving the opium, was to procure sleep, and to allay the irritation about the part; the house medicine to open the bowels, and to relieve the system in general; and the leeches to reduce the inflammation. At my next visit the pain over the pubic region had left him, and the irritation had subsided—I ordered the opium to be left off. The perspirations which he had been occasionally accustomed to, had greatly increased since the use of the bath, therefore I ordered him to discontinue it. I then gave him some of the decoction of the pareira brava, a medicine which has lately been introduced into this country for affections of the urinary organs, three times a day. At this time there was a whitish sediment deposited in his urine; two days after he had taken this medicine the sediment was greatly diminished, his bowels became regular, and the pain about the part affected left him. When I first saw him, my object in not passing a sound into the bladder in order to discover the seat of the disease, was from the pain and irritation then present; for when there is so much pain and irritation about the part, to introduce the sound or any other foreign body into the bladder, will only add to the same symptoms. If, on examination, I had found the pain and irritation the same, I should have adopted the same plan of treatment in keeping the patient quiet, &c. &c. After the more urgent symptoms became relieved, I passed a sound into the bladder, and instead of finding it pass over a smooth surface, which the inner coat of the bladder presents, it was interrupted by an irregular rough surface.

Now, in disease of the kidneys, you may have pain about the ureters and bladder, and again, you may have great irritation about the kidneys and ureters in consequence of stone and other morbid conditions of the bladder. In this case I was led to believe there was an affection of the urethra, from his urine passing in a small stream, indicating a disease of the canal, which I thought to be stricture; but on introducing the sound I found there was a chronic inflammation of the mucous surface of the bladder. The testicle, I have said, was diseased; this may arise from various causes; it sometimes becomes affected from a gonorrhœal discharge from the urethra, from inflammation extending from the urethra to the testicle, and from various other morbid conditions of these organs. When the tunica vaginalis becomes thickened, the epididymis enlarges, and there is an enlargement of the vas deferens. In that case I have always found a disease of the urethra to exist. If I find the vas deferens of its ordi-

nary size, I conclude then that the urethra is in a sound state. On a minute examination of this case I found the vas deferens of its ordinary size, and I said to those around me, "Here is no disease of the urethra;" and those who were with me, I have no doubt, will recollect it.

But I said that it was a disease of the epididymis, and hydrocele of the spermatic cord, for in this case I found the vas deferens of its proper size—the pain then, that he experienced in the urethra, was sympathetic. The first thing that was done with regard to treatment, was to lessen the pain and irritation, and to regulate the state of his bowels; to correct the properties of the urine, which were acid, by alkalies, and to support the debility which arose from the perspiration, by tonics. It was on the 21st of the month when he took the decoction of pareira brava with the liq. opii, sed., house medicine; his bowels being confined, and a nutritious diet; his pulse became good, tongue clean, and bowels regular, which was from the 21st to the 23rd, only forty-eight hours after his attack. From this it is fair to infer our view of the case was correct. By the continuation of these means the patient will get rid of a troublesome disease, which had plagued him for the last three years.

The next case of disease of the bladder, was Samuel Crabtree, aged 39, admitted about the same time as the preceding; states that he has been ill since April, and owes the origin of his complaint to a blow about the perineum and scrotum, which happened from a fall; since then his urine has not flowed so free as usual, the stream of water about the size of a crow-quill; feels heat and smarting throughout the whole of the urethra; urine slightly acid, and of a deep red colour; it does not deposit any sediment; feels great pain about the part, particularly on the left side; cannot rest at night; his bowels are costive. I ordered him to use the tepid bath, and to take some liq. potassæ, to correct the acidity of the urine, and bals. copaiba, because it tends to correct the morbid secretions from the bladder; and a small quantity of tinct. opii, to allay the irritation he complained of. He had also a pain in the lumbar region, for which I ordered him to be cupped to 8 oz. and to take house medicine occasionally. On the 18th, two days afterwards, he was much improved, and the pain greatly diminished; the 19th, he had retention of urine, for which a catheter was used, and a pint of urine drawn off. On the 21st, I ordered him to take of the tinct. ferri. muriat. xx grt.; at this time a slight patch of erysipelas was observed on the side of his nose, his urine was passed without much inconvenience. 22d. He had a very restless night; the erysipelatous inflammation extending over the face and neck, from which he experienced much pain; pulse weak and compressible, and he appears to be getting

worse. I now discovered that he was in the habit of drinking a quantity of gin, to the extent of five or six glasses before breakfast. He was sensible when I visited him, but his pulse very feeble. I ordered him to be put upon nutritious diet, and to take three or four oz. of gin in the course of the day—that being the beverage he had previously been accustomed to: the former symptoms were much relieved, in consequence of such a severe disease being set up in another part. In the first place, then, he had stricture, which became so bad as to obstruct the urine; great irritability of the bladder at times; morbid condition of the urine, its acid property relieved by alkalies, a remedy which, from experience, I have found very beneficial; pain in the loins, for which blood was abstracted. He also told me, before his admission, he was subject to have frequent retention of urine. In retention of urine the ureters become distended, and by these means produce irritation and even pain about the kidneys, and I have no doubt but that was the cause of the pain which he experienced in the loins. Then erysipelatous inflammation came on, for which he was put upon a nutritious diet, and took a certain quantity of gin daily. I should not have given him the gin, if I had not found out his previous habit, or else I should have given him ammonia. This was a case of idiopathic erysipelas; but in the other patient, who had the tumour on the thigh, and became the subject of erysipelatous inflammation, who, I have told you, I am afraid will not exist many hours, was affected with the traumatic kind. Now this species generally requires quite the opposite treatment to idiopathic. I recollect having a case under my care of the latter, in a man who had an erysipelatous inflammation begin at the great toe, and extend up the extremity, continuing up to the top of the head, over one side, along the mesian line, so that the whole of one side of the patient was enveloped by this disease. By keeping him upon a nutritious diet, together with ammonia and quinine, he quite recovered. On the other hand, in traumatic erysipelas, arising from injury, having in general hard throbbing pulse, great heat about the part, bloodletting must be had recourse to, and that freely.

There was a case in this hospital which came under my care; it was at that time when the surgeon was very much interfered with by the physician; there was a man under my care who, from some injury, had a violent attack of erysipelas. I ordered him to be bled freely, and to take some purgative medicine; but before my dresser bled him, the physician came through the ward and saw him, who said, at that time, my treatment was wrong, and desired that the man might not be bled, but put on a nutritious diet, and ordered him to take ammonia, and in the course of a short time the man

died. Soon afterwards there was a woman admitted, who had the same symptoms from some similar cause, and who was of a robust habit. I ordered her to be bled; being determined from the result of the other case to have it done, I got the dresser to do it in my presence. I then gave some colocyath and calomel to her, which I had sent for at the time, and she ultimately got quite well under the same treatment. I merely mention these cases to show you, that bleeding, together with purgatives, is correct in some cases; and nutritious diet, together with opium, ammonia, and wine, in others. The man whom I first spoke of was kept upon nutritious diet, took a quantity of gin daily, and got quite well.

In connexion with diseases of the bladder although there might be pain in the organ, yet there might be no disease, and still, without much pain, the bladder may be diseased. Some years ago a man applied to me for advice; he had frequent desire to pass his urine, pain along the urethra and glans penis, every symptom which would lead one to believe there was stone in the bladder; the skin was hot and dry; bowels confined; the whole constitution appeared to be affected. My object was to get rid of the constitutional symptoms. To do this I ordered him some calomel and colocyath, or blue pill and colocyath; it is so long ago I almost forget, without referring to my note-book. In a few days afterwards he called upon me again, and felt himself quite relieved, for all the symptoms had abated; in a short time afterwards he was again attacked with the same symptoms; he applied to me, but being from home at the time he applied to some other medical man, who gave him some medicines, but finding no relief from them, he again called upon me. I found the symptoms as before, if anything more violent. I gave him the same medicines, but he experienced no benefit from them; the pain still increasing I thought again there was stone. I then determined to pass the sound, which I did but could find none.

The disease continuing, he was not able to go on with his usual employment, and I admitted him as a patient to this hospital. I put him under a mild nutritious diet, ordered him the warm bath; he had morbid secretion of urine, which had alkaline properties, for which I ordered him acids; he continued to lose flesh very fast, and died. I got leave from his friends to open him, being very anxious to know where the disease was; during the time I was making the examination, his brother, who was standing by to witness it, said, did my brother ever tell you before he died, of receiving an injury of the loins, and afterwards that he passed a quantity of blood by the urethra from the kidneys? I replied in the negative; and then I found both his kidneys very much diseased. He had then, in the first place, in-

jury to the kidneys, followed by symptoms like stone, which were at first relieved by medicines, which repaired the constitutional symptoms that arose from the disease; it again returned; the same medicines did no good, and the disease continued until it destroyed the patient.

There was another case which came under my care. A gentleman, who was subject to frequent desire to pass his urine, and occasionally passed blood with his urine; in consequence of which, my attention was led to the kidney, but in spite of all remedies, the disease still continued. I fancied there must be either stone, or some clotted blood in the bladder; I passed the sound, made a careful examination, but could find nothing like stone. Subsequently to this, he passed a small calculus in his water, which Dr. Prout proved by analysis to be the oxalate of lime. Soon afterwards, Dr. Prout, whose ability you must have all heard of, saw him with me, and he gave it as his opinion, that there was a calculus of oxalate of lime in the kidney. This kind of calculus always being very rough on its external surface, on any violent exertion, irritates the surrounding parts of the kidney, and by that means causes the hæmorrhage; the irritation and frequent desire to pass his urine is sympathetic. This gentleman is alive, and still continues to have the same symptoms.

These kind of cases are frequently mistaken for diseases of the bladder; stone in the bladder is frequently connected with organic disease of the kidney; and before you have recourse to the operation, the remedies are to keep the patient at rest, and get the secretions in good order; but it very frequently happens, that a patient has an urinary calculus, the surgeon will keep him at rest for a few days, and then cut him, although there might be an organic disease of the kidney existing at the time; and I have no doubt but the majority of deaths that take place, are in those who are suffering under some organic disease at the time of operation. I should recommend you always, before you are going to operate for stone, to take care that no organic disease exists.

On Thursday last, together with other interesting cases, I admitted a man with oblique fracture of the tibia; it happened about seven weeks ago, and the parts have not yet united; the man being young, they ought to have done so before this.

Our time having expired, I shall not enter into the particulars of this case to-day, but leave it until our next meeting. I recommend you, gentlemen, to pay attention to this case; the man is now in Abraham's ward. This then, with some other cases, I shall proceed with at our next meeting.

PATHOLOGY OF
SPASMODIC CHOLERA.

By S. HOOD, A.B. M.D. Brighton.

SPASMODIC cholera, properly speaking, is a combination of diseases grouped together, appearing at once or following each other in rapid succession; and to me, while I continued a believer in the pneumatic theory of animal heat, and Haller's doctrine of irritability, it appeared a perfect medical paradox, flatly contradicting these great physiological principles taught in the schools. In this disease nature and the professors are at open issue; and, as nature cannot be wrong, the plain inference is, that the professor cannot be right: one of two things, therefore, will occur, either the spasmodic cholera will prove a radical reformer of physiology, and place the scholastic theories of animal heat and irritability permanently in schedule A; or it will fruitlessly traverse these kingdoms, and appear to the profession generally as an inexplicable medical anomaly. Elsewhere, I think, I have proved by strict analysis, and direct experiment, that animal heat is produced by the combined action of the blood-vessels and nervous system, that spasm is caused by diminished action of the nervous system, and that the muscles, as well as all the soft fibrous textures of the body, derive an involuntary expansive power from the nervous system, varying in extent according to the degree of animal temperature. In the following observations I shall often refer to these four laws of vitality, as established on irrefutable facts, though, I am well aware, they are not received as such by the profession.

It was with great satisfaction that I perused the circular of the Board of Health, stating that spasmodic cholera often begins with a purging—this is the first step in its pathology; it is like fixing the royal impression on the precious metals. The fact was known before to be true, but the cir-

cular gives it currency and value. When stationed in Fort St. George, it was part of my duty to select the patients in garrison for the hospital, and I never met with one case which had not began with premonitory diarrhœa. This primary purging appears to arise from a sympathy of the alimentary canal with the brain. The biliary flux of this country was common enough in the garrison; but I do not believe there was one instance of its assuming the character of spasmodic cholera, which it most likely would have done had the disease originated in the abdominal viscera. What physical change the brain undergoes when the bowels sympathize with it by violent contraction, may be inscrutable, but its effect is often undeniable. I have, for instance, known a wealthy man attacked by diarrhœa, caused by the protestation of an acceptance for fourteen pounds, who stated that "he was invariably afflicted with it when he lost money;" and I have also known an affectionate mother suffer repeatedly in the same way, from the misconduct of a favourite son. During the purging stage of the disease the bowels are usually emptied by copious watery dejections, without nausea or pain. This is the favourable period for cutting the disease short; the blood is now losing its fluidity by the serous discharge, and a train of consequences, which place life itself in imminent peril.

What the supervision of the cold stage of a quartan ague, during a violent diarrhœa, might produce, I cannot say, never having seen such a case, but I apprehend the effects would be the same as in spasmodic cholera, viz. spasm, coma, apoplexy, and death. In reading over this paper to my friend Mr. Dill, he informed me that he had seen a quartan follow this course, only the patient recovered. The sinking of the animal temperature announces that the action of the nervous system is becoming feebler than natural; the expansibility of the heat is diminished,

which renders it unable to suck up the blood from the vena cavæ with its usual force; the calibre of the arteries also becomes smaller, from their reduced expansibility, and the blood is consequently thrown upon all the cavities, while its serum, already lessened in quantity, by the previous diarrhœa, runs off, as through a sieve, by the intestinal exhalants. To say that the unhappy sufferer, in this stage of the disease, is dying of internal hemorrhage, from the loss of the colourless portion of the blood, is scarcely a metaphorical expression. I would, most earnestly, entreat every practitioner, who may be called on to prescribe in this stage of the disease, to pause and consider the effects of a purgative before he orders it. Why should the blood be reduced to the viscosity of glue, and rendered unfit for all the purposes which nature intended? If I have not put this reasoning, derived from personal experience, with sufficient force to guard the unwary, I shall be sorry, because I once had a military circular put into my hands to execute, which was followed by such consequences, that, even now, I can look back on none of them with the slightest satisfaction, except, that finally I disobeyed the order; perchance at the risk of my commission. The profuse waste of the fluids produces an insatiable thirst for cold acidulated drink, which is almost a pathognomonic symptom of the disease; I never found a case without it, and particular notice is taken of it in the letter of a mechanic, who witnessed it in Russia. Nature thus, as it were, instigates the patient with an irresistible desire to supply the waste of serum, and preserve existence by cold acid liquids; an indulgence which, it is to be feared, is but too often cruelly denied. By the loss of serum the blood becoming viscid is less adapted to circulate in the small arteries; nor is this the whole detriment. It is certain, that the arteries of the face and extremities have their calibre narrowed, from the decreased action of the nervous

system; rigid analogy, therefore, entitles us to infer, that the branches of the pulmonary artery undergo a similar reduction of calibre in their extreme ramifications, by which means the viscid blood cannot arrive at the fine net-work, on the air-cells, to be properly decarbonized. It therefore follows, that until the natural expansibility of the arterial system is restored, inhalation of oxygen is superfluous; and when that is restored it is equally superfluous, because there is enough of oxygen in atmospheric air to decarbonize the blood, when it can reach its destination on the air-cells of the lungs.

How the opposite passions of joy and sorrow, or stimulants and sedatives, should induce a state of the brain similar to each other, and cause similar effects on the abdominal viscera and muscular system, this is not the place to enquire, nor indeed is it requisite, for the cause of spasmodic cholera has a direct and violent sedative effect on the whole nervous system. Tetanic spasm is considered a state of great excitement, but here we have this kind of spasm in great perfection, and occasionally a complete lock-jaw, when the animal heat is gone, the pulsations of the arteries imperceptible, and the motion of the heart itself is confined to an indistinct flutter. Unless, therefore, we are prepared to admit with John Hunter, that death itself is a "stimulus," spasmodic cholera must be an intensely sedative disease. Swimmers are liable to cramps, yet cold is a sedative to the nervous system. Spasm also occurs in neuralgia of the sacral extremities; and what is more, the limb often assumes the livid hue so remarkable in spasmodic cholera. Dr. Ernest Burtel, solves the difficulty in the following manner;—Il y a aussi polarité dans le système musculaire, savoir: état positif dans l'expansion, et négatif dans la contraction. Sooner or later to this conclusion physiologists must come at last. Thus spasm does not depend on any inherent property of the muscu-

lar fibres, but whether the nerves which supply them with vitality be in a positive or negative state of animal galvanism; if in the positive state, there is expansion, if in the negative, contraction and spasm. In spasmodic cholera therefore, there is a sort of contention between the positive and negative galvanism, for the supremacy, and unless the positive prevail, death is inevitable. If this rationale of spasm is denied, no one will have the hardihood to deny also, that muscular expansibility accompanies the restoration of animal heat in spasmodic cholera. I have never witnessed that form of the disease which has been compared to the coup de soleil; but if the par vagum be in a negative state of galvanism, the heart must be instantly paralyzed. If spasmodic cholera were unaccompanied by diarrhoea, vomiting, and loss of heat, it would constitute the tetanus of nosologists; or, if it were unaccompanied by tonic spasm and diarrhoea, it would constitute the cold stage of fever, whose character would remain to be specified by the nature of the febrile re-action.

Another remarkable character of spasmodic cholera remains to be noticed, the cold stage is followed by no natural re-action, and when the state of the blood, the mechanism of the body, and its motive forces are duly considered, a spontaneous re-action appears next to impossible. I should mention, however, that one case of spontaneous re-action was observed by Deville. As the blood accumulates in the cranium, the spasms abate, the brain becomes compressed, and apoplexy terminates the brief career of the disease. It sometimes also happens, that after a long cold stage a considerable re-action may so far alleviate all the symptoms, as to flatter both the patient and medical adviser that all is over; when without the least notice, the patient expires apoplectic. In all such cases, the cerebral vessels are either gorged with blood, or effusions have taken place. Deville mentions a recovery

from the apoplectic stage, but it was at the cost of a hemiplegy. I speak of the state of the brain exactly as I found it on dissection, without which, I should consider myself disqualified to write on the disease at all. The opinion that this disease has its origin in the abdominal viscera, has rendered the information respecting the brain very scanty, but I may cite the following extracts from Bell and Kennedy; "There was about half an ounce of serum slightly tinged in the base of the brain; the vertebral canal could not be examined in a manner sufficiently satisfactory, and the only circumstance which I was capable of noting was, part of the serous fluid oozing out, which no doubt, ran along the sheath lining the canal from the base of the brain. Bell, p. 66.

"Nothing could be more convincing, when the calvarium was removed. The most expert anatomist could not have injected the ten millionth part of the vessels, which now covered the membranes and surface of the brain. It appeared indeed as if the whole was nothing more than a mass of blood-vessels, and every little branch seemed so entirely distended and glutted, as if one drop more must have ruptured it. There was no effusion in the surface nor in the ventricles; but if the patient had lived a few hours longer, either this or an effusion of blood must have inevitably happened." Kennedy, p. 37.

This then is the disease on which, some persons say, morbid anatomy can throw no light; and to a certain extent they are right, when research is confined to the thorax and abdomen. Let me not, however, be misunderstood: effusion or congestion of the brain is not the cause of the disease, but the cause of death, unless this is produced at once by the paralysis of the heart. Last year there was a controversy respecting the death of Marshal Diebitsch, whether he died of cholera or apoplexy; the question was easy to resolve, spasmodic cholera terminates in apoplexy when there is no re-action.

The state of the skin is not to be overlooked in spasmodic cholera.—Perforated by myriads of exhalant vessels, the skin usually stands like a sentinel over these minute portals, preventing, by its expansion, the too copious discharge of sweat; in proportion as the heat increases, and the pulse rises, the dermoid system expands so as to close effectually the orifices of the exhalants when fever is present. In spasmodic cholera, however, the skin is paralyzed; the sentinel is asleep at his post, the exhalant orifices are left open, and a thick cold sweat oozes through, and bedews the whole body. The mechanism of sweating is very simple, yet some very intelligent men find a difficulty in comprehending it. The following illustrations will make it clear to the dullest understanding. Take a plate of iron, bore a hole in it, and make a plug to fit it exactly; heat the plate to incandescence, the expansion of the metal contracts the bore, the plug will be too large for it till the plate is again cold. Or look at the iris of a cat in an obscure light, then hold a candle close to it, and its expansion will nearly obliterate the pupil. The mechanism of sweating is exactly similar; only at fever heat the expansion of the skin is such as to close effectually the mouths of the exhalants, and cold clammy sweat indicates paralyzation of integuments.

During the cold stage the secretions are nearly suspended, but they return with the restoration of heat. It is, however, worthy of remark, that the biliary secretion is usually both thick and dark, which Paisley mistook as the cause of the disease, and devoted his attention almost exclusively to the expulsion of "black lurking bile," as he termed it. Purgatives were, consequently, his favourite remedies: but from the combined operation of the disease and doctor, his unhappy patients had scarcely a chance of recovery left them. It is needless to add, that he gave the sexton more occupation than

the cook and nurse. It was not he, however, who obtained the emphatic sobriquet of "sudden death" on the Madras station, though no man ever better deserved it, since Chiron first taught therapeutics.

In the East, the reaction of cholera, which is no part of the disease, is usually moderate—so slight, indeed, that the patient sometimes returns to his ordinary occupations the day following; but when reaction is strong enough to deserve the name of fever, it "assuages the heart and arteries," as Bontius observes; and he might have added, with Hippocrates, "resolves the spasms." In Europe the consecutive reaction seems frequently to have assumed the typhoid type, which shews that early efforts ought to be made to convert it into the synocha of Cullen. Typhus may supervene in most disorders; and when it occurs in cholera it is very likely referable, in some degree, to the treatment.

When the motive forces of vitality are traced to their true causes, and animal heat referred to its right source, spasmodic cholera becomes comparatively simple, as well as a very instructive disease, and is, in fact, a practical illustration of a great portion of human physiology—not the physiology taught in the universities, 'tis true, but the physiology of nature herself. Though a detailed investigation of the morbid actions in all the organs implicated in spasmodic cholera, forbid the sober-minded enquirer to hope that a specific for it, in all its stages, will ever be found; yet it will also shew him that morbid anatomy and physiology ought to direct every step which he takes, as steadily as they guide the operating knife of Cooper and Lawrence. Almost every practitioner who has never seen this disease, being misled by its name, flatters himself that he has some pet prescription which will enable him to grapple successfully with the epidemic. But spasmodic cholera is not a biliary flux, as its name implies; it is a serous flux, indicating a

change in the state of the nervous system. This epidemic is to the medical profession what general education is to the people—"the school-master is abroad;" but it remains to be seen whether the proverb shall be verified, that "wisdom crieth out in the street, and no man listeneth."

The inquirer who has to begin his examination of spasmodic cholera, and wishes to take nature for his sole guide, may find the following postulates, worthy of his attention, and a rich harvest of information will probably reward his industry.

1. That a clear distinction ought to be made between the cholera or biliary flux from the liver, and the serous flux of cholera spasmodica from the intestinal exhalants.

2. That a reciprocal action of the blood and nervous system generates animal heat.

3. That the blood requires a certain degree of fluidity in the small blood-vessels, and acts as a brisk excitant of the nervous system.

4. That the influence which has been denominated nervous power, vital force, nervous energy, &c. is, in fact, a compound agent, or, in other words, animal galvanism.

5. That in a state of health the positive galvanism predominates in the body, and there is heat and expansion; in the spasmodic cholera negative galvanism predominates, and there is cold and contraction. It is impossible to believe that contraction is merely the absence of expansion.

6. That it is almost impossible for a natural reaction to take place in spasmodic cholera, for the waste of the serum and congestion of blood in the cavities paralyze the viscera.

I request the reader of the above remarks not to consider them as the pathology of this epidemic, but merely as hints pointing out the method in which the disorder ought to be studied; a complete inquiry would embrace nearly all that is valuable in physiology, much morbid anatomy, therapeutics, and practice of medicine.

DEFENCE OF THE CENTRAL BOARD OF HEALTH!!

To the Editors of the *London Medical and Surgical Journal*.

GENTLEMEN,

I REGRET to think you are likely to be carried away with, what I shall call, the spirit of journalism. A party feeling seems to pervade your comments on the "Central Board," of which body I am indeed no advocate, for their labours appear to me of no avail to the public; but I am at a loss to know where you have found the grounds of charging them with "*imbecility, duplicity, vacillation, and mendacity*." These are strong and harsh terms, and unless you can, and *do*, support them by evidence, not to be cavilled at, nor controverted, let me ask, if their omission would not be more graceful, and more beneficial. I pray you, as you value the character of the profession, and an honourable existence of your journal, to consider coolly the propriety of such denunciations. If by such a course, pater-nizing too well with the style of another hebdomadal, only obnoxious for such faults, you may gain some admirers; but, on the other hand, you will lose the support and respect of others, and perhaps *in foro conscientiae*, your own self-esteem. I will now call your attention to the real object of my communication, the preceding being merely incidental.

During a residence of some years in a West India island, on some occasions I found my patients, labouring under intermittent fever, would neither take bark, nor arsenic; quinine having hardly reached our "country quarters." In several such cases I administered successfully a decoction of unparched coffee, according to a formula to be found in a paper on that subject in a number of the *Edinburgh Medical and Surgical Journal* for 1820, by the late Dr. Thomson, of St. Thomas in the Vale, Jamaica. Now, I wish to direct experimentalists, chemical, and pharmaceutical, to an

analysis of the coffee berry, as from the above fact, it appears to me not improbable that their investigations would be crowned with the discovery of some principle, similar to quinine or cinchonine, and which might be denominated coffine. If such a happy result should arise from my suggestion, our colonies would be materially served, as the manufacture of this article would lead to an increased consumption of one of their staple exports. Hoping this hint may be useful, I have the honor of subscribing myself.

Your obedient servant,
FREEDOM.

March 28, 1832.

THE CENTRAL BOARD OF HEALTH.

"Faugh! the offence smells rank."

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I HAVE been a constant reader of your new Journal ever since its commencement; I admired the broad principles of independence which you gave forth to the world in your prospectus; I admired still more the bold tone of vigorous impartiality which was so conspicuous in your first four or five numbers; and, more than all, I admired the chemical and pharmaceutical accuracy which you displayed in dispensing the various prescriptions for those melancholy lunatics, yclept the Members of the Central Board of Health.

Out upon those who would call this the age of improvement and reform, when, in the very heart of the kingdom, and in the very centre of the most scientific bodies in England, we find a set of men who, forsooth, join themselves together realizing the old adage that—

"Birds of a feather flock together,"

and forthwith constituting themselves into "a Central Board of Health." Verily it is high time that all this farcical masking should end; that

every jackdaw amongst them should cast off his borrowed plumes, and every scabby sheep be sent to the Thames, and well washed and cleansed of all his impurities.

The first Board of Health, consisting of their high mightinesses of the College in Pall Mall, was bad enough; every one knew it, every one saw it, and every one cried out against it, and they very wisely retired from the public gaze, each one, like a wild beast, to his den again, and each one pocketing his £125 of the public money, for doing nothing but recommending cajeput oil, of which they knew little or nothing, for the cure of cholera, of which they certainly knew less.

When the present Central Board of Health was formed, the public, and more especially the members of the profession, looked forward to the fulfilment of the many prophecies and promises which had been made by their predecessors in office, but alas! in vain; days and weeks passed by, but nothing appeared beyond the usual decimal reports of cases of true and false cholera—real and feigned cholera—cholera and pseudo-cholera—till all at once the town was "frightened from its propriety;" the bill stickers, and the scissors-and-paste gentry, were set to work, and all London, from Limehouse to Chelsea, and from Westminster to Highgate, was very soon satisfied that "looseness of the bowels was the beginning of cholera." In these few words what a deal was expressed—what profound research—what depth of thought—what powerful rhetoric—and, as a bold and happy relief to all this, what true stupidity—what April ignorance—what besotted simplicity did all this display. The first announcement which these worthies made to the world, was by bringing out the Cholera Gazette, stamped with the Royal Arms, and "published by authority." I confess that my hopes were raised when I first heard the sound of this flourish; there was great room for good to be done. Many of the phenomena of

cholera (if there ever was cholera) were as yet but imperfectly known to many of the members of the profession residing at a distance from those places where the disease had shewn itself, and here was a publication which would tend greatly to spread and diffuse that knowledge; here was a field of enquiry open to all; but all these hopes were disappointed; all these anticipations were unrealized, when the first number made its appearance; the succeeding numbers have not very much improved upon it, and so far from its being the vehicle for diffusing facts relative to the phenomena of the disease among the profession; this very clever hebdomadal has degenerated into an engine puff, where-with to bolster up its patrons, and to remind the public every fortnight that there are a set of beings, styling themselves the Central Board of Health, who put forth, through Mr. Highley their publisher, this precious document to the public. Verily, they and their book shew a plentiful lack of that necessary article termed common sense. It would be gratifying to many of your readers were you to publish the names of these Central Board gentry, for, to many (unfortunately I am sure) the brightness of their names is hid under a bushel.

The public, it is plain, place no reliance on what they say, or on the curative means (?) which they recommend; and the liberal and enlightened members of the profession are, by this time, heartily disgusted with their consummate ignorance, hypocrisy, and stupidity. If they could retire from the public gaze to their own private circles, I am sure they would; but they have advanced too far to recede, without incurring the well-merited contempt and disgrace of all who think uprightly, justly, and honestly.

It will thus appear plain to all your readers, that neither of the Boards of Health hitherto established by government have been formed of persons competent to discharge the public duties imposed upon them. The

present Board of Health I have also shewn *ought not to remain in office for a day longer*. Such being the case, and such unfortunate facts as I have stated, being beyond dispute, I would suggest and propose, *that a meeting of the members of the profession in London, be called; that a meeting be held, and a petition drawn up and presented to the honorable members of his Majesty's Privy Council, praying that they will dissolve the present Central Board of Health, and forthwith form another, composed of such clever and talented members of the profession as have seen the disease in India, Russia, and Poland, who are well and perfectly acquainted with its nature and symptoms*, and who, more than all, are capable of distinguishing Indian or Russian cholera from Mary-le-bone cholera, (save the mark?) and *who do not stick up placards prohibiting their professional brethren from seeing cases when they occur*. This latter circumstance is a blot on their reputation, a scar on their character, a festering sore on their professional respectability, and on their characters as gentlemen, which will never heal, never granulate, and never unite by the first intention.

I will leave this subject now (pro tempore) in the hands of your readers. If the members of our profession act as they ought to act in this critical emergency—if they know that union is strength—if they perform that duty which every enlightened member of society expects they will perform—they will come boldly forward and assert those rights of independence and freedom to which every man is born; they will be the first to stand forth in support of that system of moral regeneration and reform throughout the profession, the very first step to which, in the present times, is the dissolution of the present Central Board of Health, and the immediate establishment of another based upon firmer, juster, truer, and more honorable and equitable principles, one that shall command the respect and esteem of the public by

exercising a mild, moral control in all its actions over the general opinion, and secure the entire, immediate, and friendly co-operation of every professional man in the kingdom; and who, when their labours shall end, will retire bearing with them the thanks and gratitude of every upright and honest man for their just and noble exertions in a cause sacred to the truest interests of humanity.

I trust that you will excuse my having trespassed so far on your valuable pages, but the subject is one demanding prompt and immediate attention, and this I am sure it will receive at your hands. Should some measures be not forthwith taken to remove the present rank offence, I shall write again on the subject.

DELTA.

P.S. I will send you a few remarks on Dr. Leonard Stewart's address to the public next week.

INSOLENCE OF THE EDINBURGH BOARD OF HEALTH.

"Similes similibus gaudent."

Gross Insult offered to Professor Lizars for being a Non-contagionist.

THE Edinburgh Board of Health, being a legitimate descendent of that parent of alarm and mischief, the Central Board of London, has offered, on the 29th ult., the grossest insult that any dog in office could be guilty of, to one of the most scientific, and decidedly the most independent Professor of Scotland, which has as yet been attempted, by those ridiculous bodies which have been most injudiciously and unwisely placed by the government over the whole profession, and which are empowered to play their fantastic tricks by the aid of law and constables. We dare not venture to comment upon the following gross and insolent breach of common politeness, but must observe, that Lord Hope, the President of the Board in

question, displayed such an obtuseness of intellect as can admit of but one explanation, and that is, that he is a zealous worshipper "of the powers that be," and has a keen eye on those magnificent gifts vernacularly designated loaves and fishes, which are at the disposal of the government. He has certainly displayed great loyalty and dutiful attachment to the present administration, and is therefore entitled to immediate promotion for his zeal and insolence in the diffusion of the alarm with respect to cholera. We copy the subjoined letter, addressed to Lord Melbourne, from an Edinburgh newspaper of Saturday, 31st ult. :—Mr. Lizars says,—

"In compliance with this request, and without the slightest communication of the purpose for which I was invited to attend the meeting of the Board—presuming, indeed, from the circumstance of my being one of the medical officers whom the Board had requested to do duty in one of the cholera hospitals in town, that the object was one of professional consultation—and feeling that, as Professor of Surgery to the Royal College of Surgeons, the Board might have thought fit to confer with me on the objects of their institution, I attended at the time appointed, without the slightest anticipation of the circumstances which occurred. The more prominent of these I shall now detail for your Lordship's information.

"When I entered the room in the Council Chamber where the Board of Health meets, I found the Lord President (Hope) in the chair, and about fifteen other persons, medical and non-medical, in deliberation. I had scarcely taken a seat when his Lordship, holding in his hand a pamphlet which I published last week, (the result of much personal and professional labour and anxiety), without any manifestation even of common courtesy, interrogated me, in an overbearing and inquisitorial tone, if I was the author of that pamphlet? On seeing it, I said I was. His Lordship immediately, addressing me as if I had

been a felon at the bar of a criminal court, said he had never read a more imprudent, inflammatory, and dogmatical Essay in his life; that he had submitted it to the Solicitor-General; that he did not know what that gentleman would do; but that, were he (the Lord President) Lord Advocate as he had once been, he would have indicted me before the Justiciary Court, to answer at the bar of my country for the inflammatory language contained in a paragraph which he then read.*

"I will not, my Lord, incur the statement with a detail of all the contumelious and unwarrantable observations which this high functionary made; but it would be derogatory to my professional situation, and degrading to my feelings as a private gentleman, if I did not inform your Lordship and the public, that the Lord President, as Chairman of the Board of Health in Edinburgh, took upon him to say to me, in the audience of the other members of that Board, that, in reference to certain passages which he read from my publication, "*no man of common sense would have written them—no man but a blockhead.*" I need scarcely add, that in my attempts to explain my own meaning I was always rudely interrupted by his Lordship,

"Although quite unprepared for such a reception, I kept my temper, and repelled some imputations which he made, by explaining the passages alluded to in such a manner as to show that his Lordship's impressions

* The resurrectionists of this city, about twelve in number, have escaped the disease, with the exception of one, who, having received his share of the booty of one body on a Tuesday, kept drinking and debauching until the following Thursday, when he was attacked with cholera, and died. The Tuesday completed the fifth week from the first body which he had disinterred of cholera, and he confessed to have raised six during that time. All the while he was leading a most debauched life, and troubled with diarrhoea; and, on inquiry, I find that no medical student, upwards of a hundred of whom must have been dissecting cholera bodies, has been affected.

were utterly and profoundly absurd. In particular, his Lordship, referring to a passage,* said that it was a most illiberal aspersion on all the medical members of the Edinburgh Board of Health. I told him that I there alluded to what I had witnessed in the Mediterranean, particularly at Malta and Gibraltar; and that I was convinced, from what I knew of his own disposition, if he had witnessed the same miseries which I had, he would have written what I had done, to stifle the demon (as a doctrine) contagion—that I alluded to no particular individual—and that if the passage touched or gave offence to any individual of that Board, I regretted it.

"His Lordship, however, persisted in asserting, that, by expressing my views on the subject of contagion, I had written *solely* with the view of attacking the medical men of the Edinburgh Board. I replied, that I had written the work *solely* to illustrate the *pathology* of the disease, and that contagion was an incidental topic, resulting from that and my anatomical

* The medical man who *conscientiously* believes in the contagious nature of this appalling disease, cannot perform his duty zealously or effectually. He is only mortal, and, in this enlightened age, he knows that no spell or charm can guarantee him from the demon, contagion. He looks afar and transiently upon the dying wretch, writhing under the agonies of the disease, as a forlorn hope, and rushes through the breach, thus conjured by his terrified imagination, instead of manfully grappling with the foe, and wresting the hapless victim from his grasp. I have witnessed many a contagionist medical man feeling the skin and pulse of the patient with gloves on his hands, a handkerchief over his mouth, and a scent bottle at his nose, and stopping as short a time as possible with him. To do justice to a cholera patient, the medical attendant must remain with him for an hour or two, and put his own hand to the work. Can the contagionist do so? I reply, No. On this point Greenhow thus observes:—"We must take a leading part in the administration of remedies. We must direct, superintend, and assist in all. We must be content to perform not only the part of the physician, but of principal nurse also, perhaps for many hours' continuance."

The Kirghis Kaisaks, residing on the

investigations; and that, if my pathological views had not been corroborated by the celebrated Professor Delpech of Montpellier, as stated in my preface, those observations never would have been published. I inquired if his Lordship had read the pamphlet. He answered that he had; and I replied that I could not believe it, from the partial and isolated extracts which he had brought forward. I informed his Lordship, in particular, that I alluded, not to the Edinburgh Board of Health, but to the Central Board of Health in London; but his Lordship, in despite of the printed book itself, and of my disclamation, asserted, with the most domineering and authoritative dogmatism, that all I had written was for the purpose of casting odium on the medical department of the Edinburgh Board of Health. His Lordship asked if I would disclaim any intention of attacking the medical members of the Board. I said I could have no objection to do so, and I redeemed my pledge last night by writing to the Lord President a letter which is hereto subjoined.

"I do not pretend, my Lord, to be able to give such a detail of this conference as would convey any adequate notion of the *assumption of this President* in the Edinburgh Board of Health. Neither will I here state the subsidiary and parasitical remarks which were made during the sederunt by some individuals, medical and non-medical, upon this occasion. The latter are too insignificant for notice

banks of the Ural, have a very effectual mode of purifying their camps, and extinguishing contagious diseases in the bud, viz. by instantly abandoning their sick to the grim tyrant Death, and moving off to a distance of fifty or sixty miles. The inhabitants of the Polynesian Islands, when suffering under sickness, more particularly if they consider the disease irremediable, remove the sufferer to a separate tent, where he perishes from neglect; or they despatch him with their clubs and spears, and even bury him alive. I ask, Are we more civilized?

[This passage his lordship applied as alluding to the medical men of the Edinburgh Board.]

in this place. But I deem it of importance that your Lordship, as the organ of government, should be informed that the Edinburgh Board of Health has constituted itself into a court of criticism in matters of medical science—the Lord President of the Court of Session being Supreme Judge—that it arrogates to itself a power of summoning before it the author of a work devoted to investigations of a purely medical character, and that it presumes to requite perilous and laborious researches amid the scenes of disease and death, with an arbitrary and unwarrantable doom of reprobation.

"I have not been able, my Lord, to discover any *legal authority* in this Board to assume such powers. If there be any such sanction, it is unknown to me; and, indeed, I believe that at this moment the Board of Health in Edinburgh, to whom in some of their exertions I have cheerfully given my humble aid as a professional auxiliary, have never promulgated to the lieges any intelligible information with regard to their powers and their duties. The sooner that they do so the better for their own honour and the satisfaction of the public.

"I cannot, however, allow myself to suppose that the legislature or executive of this country have by any acts, conferred upon any of our Local Boards of Health, composed as they are of legal functionaries, clergy, provosts, bailies, deacons, and bankers, with a sprinkling of medical gentlemen, any power of interdicting the investigations of medical science, or of *stifling* the publication of researches and experiments which are calculated, however feebly, to throw light upon one of the darkest and deepest subjects that ever was submitted to the inquiry of mankind; and which, by the terrors that it has recently shed over the world, has acquired a peculiar claim to the unfettered and zealous investigations of science, guided by humanity. Such inquiries, and such publicity to their results, are not

to be *dragooned* by any Boards of Health in any quarter of the British dominions.

“Allow me, my Lord, before I conclude, to inform you that the Essay which has attracted the high animadversion of the Lord President, was several weeks ago read by me in the Medico-Chirurgical Society of this City; that at a very numerous meeting of that body, at which Dr. Abercrombie presided, and Drs. Allison, Gregory, and other members of the Edinburgh Board of Health were present, I received the unanimous thanks of that Society for this same Essay; and that an extraordinary meeting of it was afterwards held for the purpose of discussing its topics, on which occasion not one of these eminent persons discovered those heresies and abominations which by their apparent sympathy, *yesterday*, with the Lord President, they leave it to be inferred they condemn. I submitted my work to the medical profession—not to the Lord President of the Court of Session, or the Edinburgh Board of Health, whose competency to decide upon its merits I utterly repudiate and despise. *Ne sutor ultra crepidam*.

I subjoin the correspondence which I had last night with the Chairman and Secretary of the Board of Health, and have the honour to be,

My Lord, your Lordship's most obedient humble servant,

JOHN LIZARS.

March 30, 1832.

MEDICAL REFORM.

It affords us much pleasure to record the following petition, which emanates from one of the Irish provinces, and sets a glorious example to the profession in England and Scotland. We trust, that the day is not far distant, when the legally qualified members of the medical profession, in the different sections of this empire, will enjoy equal rights and privileges in every part of their common country:—

MEDICAL PROFESSION.

The following petition has been forwarded to the Right Hon. E. G. Stanley, for presentation in the House of Commons:—

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The Petition of the undersigned Physicians and Surgeons, of the County of Down.

Humbly Sheweth,

That, by an Act passed in the 5th year of his late Majesty, Gēo. III. ch. 20, sec. 4, candidates for the situation of surgeon to county infirmaries, in Ireland, are required to produce testimonials of having served an apprenticeship of five years, and of being licentiates of the Royal College of Surgeons, in Ireland.—That, by an act passed in the 7th George III., ch. 8. sec. 3, a similar privilege is given to the King's and Queen's College of Physicians, in Ireland.—That, by an act passed in the 36th Geo. III., ch. 9, sec. 3, the same privilege to the licentiates of the Dublin College of Surgeons is again stated, viz., of *their alone* being eligible to fill the situation of surgeon to a county infirmary, or hospital, in Ireland.—That, by an act passed in the 47th George III. ch. 50, sec. 1, this restrictive principle is brought to bear upon hospitals to be established in counties of cities and counties of towns.

That your petitioners, constituting a portion of the practitioners in the county of Down, chiefly hold their medical and surgical testimonials from English and Scotch colleges; and are, therefore, by the above acts, rendered ineligible to hold certain hospital situations in Ireland; while in England and Scotland, members of the Dublin Colleges have exactly similar rights and privileges as the members of the colleges of those parts of his Majesty's dominions. That your petitioners are anxious to call the attention of your Honourable

House to the injurious effects of exclusive privileges, in narrowing the sphere from which men are to be chosen to fill the important situations before mentioned; for it must be allowed, that the wider the field of competition, the greater the probability of efficient practitioners being selected, and of talent being rewarded.

That the Licentiates of the Royal College of Surgeons in Dublin, practising throughout Ireland, being very limited in number, compared with the great body of the profession; and the members of the King's and Queen's College of Physicians, practising out of Dublin, being yet more limited, the monopoly must, consequently, operate for the benefit of the few, to the exclusion of the many. That the Report of the Select Committee of your Honourable House, published July, 1830, Section County Infirmaries, recites, viz.—“In consolidating these acts, it will be useful to repeal a species of monopoly created under the 7th Geo. III. ch. 8, sec. 3, which limits the appointment of physicians to persons examined and certified under the seal of the College of Physicians in Ireland. There can be no doubt, that the wider the circle from which candidates may be chosen, the better is the chance of obtaining meritorious public servants. No adequate grounds can be stated for an adherence to a rule which excludes, from County Hospitals in Ireland, persons duly qualified as graduates of London, Edinburgh, and Glasgow, or who shall, in other establishments, have obtained a liberal professional education. That during the last Session of Parliament, the Chief Secretary for Ireland gave notice of a bill, founded on the said report, and including within its provisions, a repeal of the monopolies of which your petitioners complain.

In conclusion, your petitioners earnestly pray, that your Honourable House will, at as early a period as possible, take into consideration the propriety of enacting, that graduates in medicine, of all British colleges,

shall be equally eligible to all situations to be filled by physicians—and, in like manner, that members or licentiates of all British Colleges of Surgeons of his Majesty's army or navy, or all persons qualified as surgeons of the army and navy, shall be eligible to all situations to be filled by Surgeons.—And your Petitioners, as in duty bound, will ever pray.”

[Signed by forty medical men of the county.]

London Medical & Surgical Journal.

April 7th.

PROFESSOR GREEN AND HIS LECTURES AGAIN.

It is with no small share of reluctance, that we, once more, recur to a matter, which may seem too much of a personal nature; we mean the affair between ourselves and Mr. Green, of King's College. But the strange and wayward temper of Mr. Green, has forced him again on our attention, and so far as that gentleman and ourselves are concerned, we should willingly have avoided any further notice of him, did we not feel that his conduct towards this Journal, viewed in all its parts, and taken in connection with his most recent acts, presents a memorable lesson of moral instruction, such as it may be useful to the rising generation to contemplate.

Our readers will not soon forget the very precipitate and unjustifiable charge, which Mr. Green lately made upon this journal, in the theatre of King's College. We are sure, likewise, that they will have borne in

mind, a full recollection of the immediate effects which his accusations and his menaces produced upon us. We defied Mr. Green—we ridiculed his haughty pretensions; and we told him in the face of the profession and the world, that *that* right of publication which we might have surrendered out of personal courtesy to him, would then be fully acted on, since all motives for the exercise of courtesy on our part, were foolishly dissipated by himself. It was on the 6th day of February last, that Mr. Green put forth, in the presence of his astonished pupils, that insulting mandate which, it must mortify him now to think, was only treated with laughter, as many a *brutum fulmen* before it has been. In the *Journal* which immediately succeeded, (that of Saturday, 11th February) we declared the course which he had resolved to pursue. To show to our readers that there could be no ground for misunderstanding our expressions, by reason of their ambiguity, we shall take the liberty of transcribing the words themselves of our declaration, for the benefit of many of our present readers, who we fear, are still unable to procure our early numbers.

“We have no hesitation in proclaiming it to be our intention to publish, in defiance of his ostentatious threats, his lectures in such quantities, as are consistent with our sense of what is due to Mr. Green.”

“We challenge him then, to make good his threats: we give him notice, that next week, we shall insert a continuance of the lecture which ap-

pears in our present number——— for the simple and useful purpose of bringing about the decision of a question of great national importance.” — *Medical and Surgical Journal*, No. 2, p. 55.

With the manner in which we continued to act upon the pledges here recorded, the reader is already well acquainted. From week to week we published Mr. Green’s lectures, until we were fully satisfied that we had laid an adequate foundation to enable our adversary to carry into effect those pompous denunciations, which, in an evil hour, he had ventured to deliver. At the very outset we stated, that it was not for the purpose of edifying our readers with those discourses, that we determined on publishing them; no, our purpose, as we expressly said, was to provoke Mr. Green to a legal discussion respecting a great public right, and that object gained, we gave warning, that in future we should leave the lecturer to the undisturbed enjoyment of that solitude, for which, we sincerely hope, for his own sake, that his predilection will be lasting. But now the plot thickens—Mr. Green saw his lectures go forth to the world in the choicest print, just as if, instead of opposing, he had actually aided and abetted the promulgation of his discourses. What course did he pursue? Did he not forthwith rush to the council-chamber of King’s College, and there reveal the iniquitous treason which had been committed against him? And did not the council rise in indignation, and

bid their offended servant hie him to the tribunal of justice, and ask in their name for protection and redress? Alas, for Mr. Green! it is, peradventure, possible that he might have impeded the flow of that abundant tide which daily lashes the walls of the college to which he belongs. He might, for aught we know, have held the winds of heaven, in their career, with his mighty hand!—but as to stopping the majestic course of a free press, that, indeed, is an achievement which was certainly never destined to grace the biography of Mr. Green. And to do him justice, he seems to have been fully conscious of his incapacity; for of injunction, or of Court of Chancery, or of an attorney at law, or, indeed, of Mr. Green himself, we heard not one word during the whole period that we were publishing his lectures, in defiance of his threats. On the 10th of March, just one month after his denunciation, we discontinued, according to previous notice, the insertion of his lectures, concluding that our antagonist was unworthy of our arms, since we proved that all his chivalrous and vaunting menaces were nothing more than the mere emanations of that species of after-dinner valour for which the Dutch, at one period, were so equivocally famous. Mr. Green wanted the spirit to try the question, and he wanted the common policy that ought to have induced him to make some show of consistency. But he has plunged more deeply still into error.

Our readers will scarcely believe that we are speaking of a modern lecturer on surgery, when we describe the strange things which Mr. Green has allowed himself to enact. After maintaining the strictest silence during the time that we were boldly defying his power—after allowing us with perfect impunity to range, as it were, over his manor, and take what game we pleased—after he had read our repeated declaration that it was our intention not to go upon his grounds, or ever trouble his repose again—after all this, and when *three weeks* had elapsed besides, and when we thought that the affair was consigned for ever to oblivion—*then* was it—under such circumstances was it, that Mr. Green thought it expedient to send us a notice, threatening to obtain *an injunction against us if we continued to publish his lectures!* The document in which this announcement is contained, is well worthy the attention of the reader. It is a timid, compromising letter, and betrays, in every line, the consciousness of a bad cause.

“ Collège Hill,

“ March 29, 1832.

“ GENTLEMEN,—We are directed by Mr. Green, as his solicitors, to address you in consequence of the articles which, without his authority, have appeared in your publication, purporting to be lectures, or selections from lectures, delivered by him at King's College, and to inform you, that if you continue to publish his lectures, or selections, we are instructed to apply to the Court of Chancery for an injunction, and to take such other proceedings as we may be advised.

"We think it right, also, to transmit you a copy of a resolution of the council of King's College, of the 9th March, 1832.

"Mr. Green, we understand, some time since wrote to you, complaining of the publications in question.

"We are, Gentlemen,

"Your obedient Servants,

"WILDE, REES, & HUMPHREY."

"To the Publishers of the London Medical and Surgical Journal."

We have heard before of the simple rustic, who, *after* his steed was stolen, hit upon the sagacious expedient of fixing a bolt on his stable-door. Similar manifestations of the peculiar effects of *slow* wisdom are frequently attributed to the inconsiderate inhabitants of a sister kingdom. But that a preposterous contrivance, employed for the purpose of *preventing* a foregone transaction, should be the work of a man who has no Hibernian taint in his intellect, and who was bred at a distance from the primitive communities of country villages, is a fact of too serious import to be excluded from the marvellous record of our common nature. Had Mr. Green continued to observe the same prudent silence with which he viewed us in those moments when we were openly violating his supposed rights, the world would have concluded that he had repented of his precipitate attack, and had deliberately acquiesced in our interpretation of the law. But this would have been a rational course; and, departing from it, Mr. Green seems to have held his character so cheap as to commit it irrevocably, by an un-called-for, but most fatal, blunder.

By this conduct he has shown the intensity of his disposition to litigate; but in the very exhibition which he has made for that purpose, he presents us with unequivocal evidence, that either he is destitute of the courage to engage openly with his antagonist, or that he is convinced of the impossibility of succeeding against us. In either case our triumph is of the same value to the liberty of the press. We have, we think, settled it as a point of practice, that public lecturers—men who give instruction for purposes in which the public is most deeply concerned—are proper objects of public animadversion; and that, as far as their rights over literary property are involved, they stand in exactly the same relation as authors who publish their works.

We have settled another, and a very important, point also, namely, that the conductor of the press is worse than a fool, who suffers himself to be intimidated by the blustering impetuosity of any man, whose bad instincts are brought into violent action by the acquisition of a little brief authority.

Whilst we rejoice at the triumph which sound principles have obtained through our humble instrumentality, we cannot but lament, that the victory has involved a considerable sacrifice on the side of the vanquished party. It is far from being our wish, as it is altogether inconsistent with our interest, to lower the credit of our profession, by degrading the characters of the individuals who compose it. We are well aware of the

calamitous consequences which would follow from an erroneous view of our duty upon this point. We therefore, we hope, obtain credit for sincerity, when we declare, that had we anticipated the whole of the results, which have since sprung from the publication of Mr. Green's lectures in this Journal, we would have burned the manuscripts with delight, sooner than incur the responsibility of having provoked any respectable member of our profession, to work himself by the most perverse industry, into a condition so humiliating, as that in which Mr. Green now unfortunately stands.

We cannot, however, conclude, without unburdening our minds of a suspicion, which the whole course of Mr. Green's conduct amply justifies, that notwithstanding all his ostentatious opposition to the publicity of his lectures, yet the secret and fondest wish of his heart, is that very publicity. How else are we to account for his forbearance, up to the hour when we ceased to violate, what he calls his rights? How was it, that he deliberately avoided taking advantage of the opportunities which we purposely afforded him, of vindicating those rights? How is it that when we blotted out the name of "Green" from the catalogue of our contributing lecturers; and when a dreadful oblivion appeared to impend over the surgical lectures of King's College, Mr. Green should revive our recollections of him, by sending a prohibition which he must have known was totally unnecessary! Is it possible

that the gentleman calculated upon the influence of his opposition, seeing that his menaces on the former occasion only stimulated us the more to publish? We really fear that he has outflanked us completely, and that by the dexterity of his tactics he has sought to convey to the world the very flattering impression that, of such immense value do we deem Mr. Green's lectures to be, that we are induced to overlook the crime of plunder, in order to have the benefit of publishing them! Heavens! what a precious treasure must that be for which a man will stake his character!

Now that there are speculators abroad, and bearing the title of surgeon, too, who give up their minds to such complicated schemes as those to which we have just alluded, there is abundant reason to believe. But all such, whether at this or the other side of the Thames, are hereby warned, that the very first manifestation of any thing like a hypocritical jealousy of publicity, so far as we are concerned, will be instantly punished by a sentence of eternal oblivion. Those for whom this hint is intended, will readily understand us.

CHOLERA IN DUBLIN.

It is by virtue of that license of speech which every one speaking of Irish matters is entitled to assume, that we venture to state, in the title of this article, that cholera is in a place where there is no cholera at all. The tocsin was sounded early last week by the ready heralds of the

faculty in the Irish metropolis; great public alarm was the immediate consequence. The Dublin Board of Health in its very first acts manifested the identity of its pedigree with its elder brother of Whitehall, by giving the most undoubted proofs of being affected by the family failings of great obstinacy of character, and utter indifference to the public. The humbug altogether failed here. The Board of Health could not make out a case of cholera, and in default of that hospitable reception which all sorts of strangers used to be certain of meeting with in the Emerald Isle, the cholera, we suppose, took an abrupt departure, for it has not since been heard of.

In Belfast this unseasonable orientalist obtained a somewhat similar reception; and we conclude that Ireland will in future be blotted out of the map when the cholera is again about to perform the grand tour of Europe.

CHOLERA IN PARIS.

WE call the attention of our readers to the following document, which so amply attests the opinions we have hitherto maintained on the non-contagiousness of cholera. Here we have the first hospital physicians and surgeons of Paris on our side.

“The undersigned physicians and surgeons of the Hotel Dieu think it their duty to declare, in the interest of truth, that although up to the present time this hospital has received the greatest number of persons af-

fectected with cholera, they have not observed any circumstance which authorises them to suspect that the disorder is contagious.”

(Signed)

Petit	Recamier
Husson	Dupuytren
Magendie	Breschet
Honore	Gueneau de Mussy
Sasnon	Calliard
Gendrin	Bailliu.

Done at the Hotel Dieu,
Paris, March 31st.

All the medical men of the Hotel Dieu, consider cholera as a disorder not inflammatory, which should be treated by stimulating medicines.—*Gazette Medicale.*

What a splendid triumph we now have over the Central Board of Health, and the Edinburgh Board, and the alarmists. Behold the victory of truth over chicanery and misrepresentation. No quarantine, no destruction of trade or commerce, no diffusion of alarm, and pure science, as usual, beneficial to mankind.

March 30.—Up to 12 o'clock this day 178 persons have been attacked, of which 60 died. There remained, therefore, 118 cases.

The principal hospitals of Paris opened their gates instantly for the reception of patients labouring under this disease, and the above declaration was promulgated. The disease is altogether confined to the lowest and the most profligate classes. The number and amount of charitable donations for the use of the poor, which have been given by private indi-

viduals on this occasion, are calculated to excite the greatest admiration for the benevolence of the Parisians.

Hospital Reports.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, CHANDOS STREET.

Case of Gonorrhœal Ophthalmia, treated successfully by the black ointment.

GEORGE TAYLOR, ætat. 21, residing at 13, Shepherd's Market, May Fair; admitted Dec. 26th, with all the appearances of severe gonorrhœal ophthalmia in the right eye. The lids are red and swollen, and there is a plentiful discharge of thick, purulent matter. On raising the lids, the conjunctiva is seen red, in a state of chemosis, so that the cornea is considerably below the level; the edge is supposed to be slightly ulcerated, the centre remaining perfectly clear.

Some weeks ago—eight or nine—he remembers to have observed a discharge from the urethra, which produced no scalding or inconvenience; he took a few doses of salts, and in about ten days, it disappeared. The urethra at the present time, seems slightly inflamed, but there is no discharge observable. Nine days ago, he felt a pain in his head, and if he stooped or moved his head quickly, an intolerable sense of weight over the right eye, and the next day, matter was discharged from it. On the third day, he was unable to work, and an old woman recommended him to apply two leeches to the lower lid, and a blister behind the ear, also to apply a cold bread and water poultice, by which he thinks the swelling of his lids was somewhat diminished. He has also taken salts and senna, every day up to yesterday.

C. C. temp. ad. 3xx.

Calomel gr. vi. c. opio. gr. i. h. s. s.

Magn. sulph. ʒi. cras mane sumend.

Mr. G. turned out the thickened and vascular lids, and with a camel hair pencil applied the black ointment freely over the whole surface of inflamed conjunctiva, which appeared whitened after a few minutes by the application. An injection of two grains of alum to the ounce, to be frequently used.

6. P. M. He has lost full twenty ounces of blood. The chemosed conjunctiva looks pale and flabby, instead of the turgid and red appearance it had. The injection has been used, and the discharge seems less copious.

27. There is a sensible improvement in the case. The tumefaction of the lids has in a great manner subsided, the discharge is less, and he is free from pain. The chemosis is considerably reduced, and the conjunctiva

has almost entirely lost its red, turgid appearance. Rept. mag. sulph. et cont. lotio. He has been freely purged."

28. The chemosis has nearly subsided; the edges of the cornea now seem to be regular; the discharge is much diminished; and altogether there is the most decided improvement. The lids are still thick and vascular; he has used the lotion frequently, and has been freely purged by his medicine. The ointment has been applied to day, but not quite so freely as before; his pills and salts to be repeated.

29. He is going on improving; the lids of course thick and vascular, but the disease has been stopped, and no longer assumes the acute or active form. Rep. med.

36. There is little perceptible change; he is going on well however. The black ointment has been applied.

31. Continues improving.

MR. MORGAN'S BROKEN PROMISES.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I AM sorry to have so soon, after perusing your prospectus, to call on you to fulfil one part of it. I refer to that part in which you speak of protecting the rights of students. I hate complaints, but indeed, in the present case, it is scarcely to be avoided: and I am still more sorry that they refer to Mr. Morgan; for there is no surgeon (whose practice and manners I have seen) that I more respect, both for talents evident in practice, and in the sterling kind of information given by him to any one that at any time requests it.

He has taken upon himself the office of clinical lecturer at Guy's Hospital, and his lectures, if given regularly, would be a source of much information to us who are his hearers. Mr. Morgan engaged to give them once a week, on Wednesday, but it was at first put off until the Saturday, on which day in every week we either do or do not receive a lecture, as often not as otherwise.

The lectures on the diseases of the eye should be given twice a week, but generally it is once, or not at all; so that when the time comes in which

the lecture is to be given, we find there is perhaps none—as often one way as the other, I believe. It was the same last season. Excuses first are given, perhaps thus—“Mr. M. is sorry that he is not able to fulfil promises,” &c. but appoints another day instead, on which day, perhaps, there is after all no lecture. Next, “Mr. M. is prevented,” &c. not appointing another day. Then, “Mr. M. won’t be able,” &c.; and lastly, as happened more than once, there are no notices at all, but we are left to find it out by the doors of the surgical theatre being closed.

A PUPIL OF GUY’S HOSPITAL.

CASE OF INTERMITTENT OPTIC NEURALGIA.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I BEG to submit the following, in further illustration of the valuable remarks of Dr. Titley, on intermittent neuralgia, inserted in your Journal, of the 31st March.

Seven or eight years ago, I was attacked with a most violent pain in my left eye, which came on every day with the greatest regularity at seven o’clock in the morning, and ceased usually at about one in the afternoon. The affection was entirely neuralgic, and with the exception of a slight sympathetic soreness of the brow immediately above it, was confined to the ball of the eye. A handkerchief tied tightly round the head afforded slight relief. The eye was perfectly natural to appearance. At this distance of time, I don’t distinctly remember the treatment at first adopted for the removal of this truly agonizing affection; I believe I was bled, and purged, and narcotised, besides using various external applications; cooling, sedative, and stimulating, but without the slightest relief. At length the inter-

mittent character of the complaint, suggested the use of quinine, which I took in two or three grain doses, every three or four hours, in the intervals of freedom from pain, and to my great delight, with the most perfect success, the “eye-ache,” as I denominated it, being completely driven off the field in a day or two. Some time subsequently to this, I accidentally met with a very correct description of the affection, under the rather inappropriate name of *ophthalmia periodica*, in an old work, the title and author of which, I cannot at this moment recollect; the treatment recommended, was large doses of cinchona bark in the intermissions.

Since this first attack, the “eye-ache” has returned five or six times: before it is fully established, I have for a day or two, a slight pain in the head, more or less, affecting the eye; but as soon as it puts on the intermittent character, the pain being then almost wholly confined to the eye, I have the most perfect command over it, by taking four or five grains of the sulphate of quinine, every two hours, preceded by a purgative. It is singular that in one or two instances, the pain, for a short time previous to its entire removal, seemed to be transferred by a kind of metastasis to the right eye. The last time it visited me, was in February this year, and in that instance it yielded in one day to the quinine, even though I was so unscientific as to neglect the saline aperient.

Query.—Are not these intermittent neuralgic affections, the aneticus quotidianus partialis of Dr. Good?

I remain, Gentlemen,
Your very obedient servant,
M. S.

March 31st, 1832.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

As a friend to the medical pupil,—as a warm and sincere supporter of those rights which are justly his, and which your pages are so liberally opened to promote and support, I now address you, and beg to forward to you (for insertion in the London Medical and Surgical Journal) the series of questions which were put to me on my passing my examination for the diploma of the Royal College of Surgeons. The perusal of them may, perhaps, tend to relieve the state of anxiety in which many of your readers may be, who have yet to pass that ordeal. Do not let them be disheartened or dispirited at the difficulties of the examination which they have to pass; for this, in my opinion, is one certain step towards rejection. Let them have a sound and complete knowledge of anatomy, surgery, and physiology; and let them give to these branches of their profession that studious attention which they deserve, and they need have no fears on the subject.

Should you consider this letter, and the series of questions enclosed, worthy of insertion in your journal, I may, perhaps, at some future period, write to you at greater length upon this subject.

Your's truly,
C. D. M.*

Describe the femur?

What foramina has it?

Describe the acetabulum?

In what direction is the head of the femur inserted into the acetabulum?

What bones form the acetabulum?

What muscles surround the femur?

What muscles take their origin from it?

What muscles are inserted into it?

Describe the situation of the perineum?

What are its boundaries?

Where is the prostate gland situated?

How many lobes has it?

Where is the bladder situated?

What are the ligaments of the bladder, and what are they formed by?

How many coats has the bladder?

Is it entirely covered by peritoneum?

Describe the penis?

What parts do you cut through in the operation for lithotomy?

Describe the steps of that operation?

What circumstances would induce you to perform it, and the contrary?

What diseases is the urethra subject to?

What is stricture?

How many kinds of stricture are there?

How would you cure each of these?

How many dislocations of the femur are there?

How would you distinguish fracture of the neck of the femur from dislocation?

BOOKS.

Lithotritry and Lithotomy compared; being an Analytical Examination of the present Methods of treating Stone in the Bladder. With Suggestions for rendering Lithotritry applicable to the Disease in almost all its Stages and Varieties; and Remarks on the Causes and General Treatment of Gravel and Stone. By THOMAS KING, M. D. M.R.C.S. Surgeon to his Excellency the Frech Ambassador, Lecturer on Surgery, Ex-Elève de Première Classe de l'Ecole Pratique, and formerly House Surgeon to the Hotel Dieu in Paris. 8vo. 320. Three Plates. London, 1832. Longman and Co.

This work contains a graphic description of the urinary organs, a comprehensive account of the various operations for lithotomy, a brief notice of lithotritry, and reflects great credit upon the anatomical and surgical knowledge of the author.

The Dissector's Guide, or Student's Companion, illustrated by numerous wood cuts, clearly exhibiting and explaining the dissection of every part of the human body. By

* This signature has been authenticated.—
EDS.

BOOKS.

WM. TUSON, F. L. S. Lecturer on Anatomy, &c. 12mo. pp. 219. numerous wood cuts. London. 1832.—John Wilson.

A capital companion for the Student.

A Letter to the Lord President of the Council, on the best Means of preventing the extension of Cholera, or the Mortal Pestilence. By W. HUNT, Esq. 12mo. pp. 22. London, 1832.

A Dissertation, with Practical Remarks on Cholera Morbus. By E. MANBY, Surgeon. London, 1831.—Burgess and Hill.

The Pharmacopœia Universalis; or Complete Encyclopædia of the Materia Medica, containing all the Modern Pharmacopœias. Translated from the French of A. J. L. Jourdan, M.D. Edited by JAMES RENNIE, A.M. Professor of Natural History, King's College, London. Part 12. London, April.—Fry.

This great work draws to a close, and is to contain a fuller account of Materia Medica than any work in our language.

NOTICES TO CORRESPONDENTS.

Mr. Bingham will always find our reports of lectures equally correct as those of Mr. Guthrie.

A Georgian.—We admit the force of our correspondent's suggestions, but the matters to which he refers, do not, in our opinion, require farther notice in this number. Though his manuscript is good, we beg him to remember our hints to caligraphers. Medical writers and lawyers in general, are proverbially famed for their cacography.

Mr. Morgan, of Guy's Hospital, has favoured us with a very laconic letter, informing us that our reporter has ascribed to him opinions which are not his. He has forgotten to state the said opinions, and we call upon him to do so. We are sorry to learn from our friends at Guy's, that this gentleman has caught the bibliophobia of Mr. Green of St. Thomas's, and declares, that if his clinical lectures, which, by the bye, "are few, and far between," be published, he will discontinue them in future. He may make his mind easy, so far as we are concerned. Is Mr. Green or Mr. Morgan afraid to see his lectures in print, or is either so dull as not to appreciate the honour and service we do him, in placing his name beside those of the distinguished professors which appear in this Journal? We are utterly unable to comprehend the objections which these gentlemen entertain against the publication of their lectures; but they are, of course, entitled to hold their opinions, however singular.

All communications must be post paid, or they will be refused. This is the rule of all periodicals. During the last week we have declined to receive several unpaid letters and parcels; and this will explain our silence on many matters to which these have referred. It is right to state that these were from unknown or anonymous correspondents. The

communications of our regular contributors and reporters, will be received in the manner agreed on. We beg also to observe, that all communications intended for insertion in the current number, must be forwarded before Wednesday evening, as our last sheet is ready for press in the afternoon of Thursday. The large impression necessary for our circulation, and required on Friday at noon, compels us to adopt this course, and on no account can we impede it. We beg of our numerous friends and contributors to take the trouble of attending to caligraphy, as illegible manuscripts are productive of great inconvenience and expense, and often tempt us to submit them to a fiery ordeal. If writers expect to see their productions in this journal, they must attend to this hint.

A correspondent informs us, in reference to the clinical remarks in our last, that Mr. Brodie advises a ligature of internal, and excision of external hæmorrhoids.

Operating Theatre, Saint Bartholomew's Hospital.—We have received a remonstrance from a gentleman at the above hospital, in whose good faith we have great confidence, on the subject of the letter in our last, which adverted to the conduct of DR. HARRIS. In this remonstrance we have satisfactory evidence that our former correspondent was unjustly severe on that gentleman, who, as we understand from our authority, bears a character which is altogether adverse to the probability that the charge of improper conduct against him could have any foundation. We do not, therefore, hesitate to express our regret, that we have been instrumental in the least degree in circulating an unpleasant misrepresentation.

A Pupil.—We shall be happy to receive further communications from our able correspondent, though we cannot insert his present letter, as it is more political than medical. The emancipation of slaves, however important, cannot be discussed by us.

Dr. Seeds.—We cannot insert the letter of our correspondent for many reasons.

In reply to numerous correspondents, we beg to state, that all who reside in the country, should order this journal through the local booksellers. As it is published in weekly, monthly, and quarterly parts, it can be procured so as to suit all parties.

E. B.—The letter of our correspondent, in reply to Mr. West, has been received; his request will be immediately attended to.

M. T.—We shall examine the essay as early as possible.

A Student of the London Hospital.—We should be happy to comply with the request, and shall endeavour to effect the object. Would our correspondent undertake the duty? Dr. Ryan will be happy to see him any morning before 12 o'clock.

A. P. Is a great original —

Dr. Epps's instructive paper is deferred from our want of space.

THE

London Medical and Surgical Journal.

No. 11.

SATURDAY, APRIL 14, 1832.

VOL. I.

Royal College of Surgeons.

LECTURES

ON THE

ANATOMY AND DISEASES OF THE EYE,

DELIVERED BY

G. J. GUTHRIE, Esq., F.R.S., V.P.R.C.S.

Lecture the Tenth.

MR. PRESIDENT,

IN order to bring the diseases I have time to notice, in a clear and distinct manner before you, I shall now speak of those which are, in a certain manner, connected with the preceding ones I have already described. I allude to the catarrhal, and catarrho-rheumatic inflammations, between which there is in reality no distinction, save that one is an aggravated state of the other, and is, consequently, accompanied with an extension of inflammation to the more internal tunics of the eye.

Pure catarrhal inflammation is the common inflammation of this country, and generally arises from exposure to wet and cold, or confined air; the poor are frequently found labouring under it, and more especially after changes of the weather, particularly from cold and frost to a damp and moist atmosphere. The patient suffers pain and uneasiness in the eye, as if there were sand or something in it, attended with a discharge of hot and acrid tears, with great disinclination to open it. The pain is generally confined to the surface of the eye, although there is occasionally a slight head-ache; the redness is of a peculiar character, and always affects the lids. The conjunctiva of the ball may become first inflamed, but rarely to the same extent; the vessels appear reticulated, exhibiting a beautiful net-work, which I cannot well describe, but which when once seen can never be forgotten. Vision is also rendered somewhat imperfect, in consequence of

increased secretion. If the inflammation is rather severe, small white patches will be observed in places, and even extravasation of blood, here and there, may be marked on the conjunctiva. The flow of tears is considerable and hot, and the patient cannot bear to open the eye, which symptoms are called technically *great lachrymation*, and *intolerance of light*: the secretion of the meibomian glands is also altered, and there is a discharge, apparently muco-purulent, mixed with the tears. In acute inflammation the tears always run hot, and the different secretions mixing with them, and running over the lids, frequently excoriate the cheek. The discharge is not purulent, but very adhesive. There is not that acute degree of pain present which I have described as occupying the course of the fifth pair of nerves, except when the inflammation is said to be rheumatic, in which case the tunica sclerotica is affected; and if the disease is allowed to go on unchecked, in this last affection, it will produce the same disorganizing effects as in those previously described.

We will now proceed to describe the treatment in both stages. It was formerly the practice to employ emollients, poppy fomentations, &c., and these give great relief; but the disease is one which ought to be treated by stimulants, although, if the patient is very irritable, leeches may be applied to the lower lid, but never to the upper, because they will cause great effusion, swell out the lid, and prevent your opening the eye, perhaps even produce erysipelatous inflammation; the leeches may be applied to the temple, if your patient is a lady, and desirous of avoiding the marks they occasion. Purgatives should be administered as well as diaphoretics, the sulphate of magnesia with tartar emetic is the best, and stimulants should be applied to the eye. The patient should be kept on low diet. I have always used the argent. nitr. in solution, since 1816, about four grains to the ounce; two or three drops should be poured into the eye, so as to be applied over the whole surface. It will soon

run out white, the nitrate being changed to a muriate by the salts contained in the tears. It causes an increase of pain, which soon subsides, and the patient becomes more comfortable; you may then make use of either warm or cold applications, according to the feelings of the person. By proceeding in this manner, the flow of tears and the intolerance of light are diminished, the redness disappears from the anterior part of the eye, the sandy feel or pain is removed, and the patient thinks he is cured; but he is mistaken, the eyelids remain inflamed, and the first cold or drinking-bout will bring back the old complaint as bad as ever. It will be a long time ere it is really removed, and very few like the trouble attending it, so that it generally becomes chronic. To complete the cure, stimulants must be applied to the inside and edge of the eyelids, long after the redness of the eyeball has disappeared, such as the ung. hydr. nitr. or the ung. hydr. nitric-oxydi; these ointments should be applied with a brush, with a point so fine as just to touch the edges of the openings of the meibomian glands; they will both cause smarting for about five minutes, and then the pain will go off. The golden ointment is a sharper application than the citrine, and this is supposed to depend on some arsenic which is mixed with it. Passing the sulphate of copper once or twice over the lid is very useful. A solution of alum, one grain to the ounce, and oxymuriate of mercury, in elder-flower water, one grain to eight oz. are very good applications, but neither preparations should be dissolved in rose-water, as that is prepared with spirits of wine, and would be the cause of more excitement than is useful. In this way we cure a very simple disease, which will, however, often last for three or four months, unless great attention be paid to it. When the disease is more severe, affecting the sclerotica, and perhaps even causing chemosis, blood must be taken away, and then the ointment of nitrate of silver may be applied, which will remove the external inflammation, and often has a marked good effect on that which is internal; the further treatment is to be as already directed, a little increased in activity.

I will now draw your attention to a fact about which there has been great dispute. It has been asserted that the purulent ophthalmiæ left a chronic state of disease of the lid, which was capable of becoming contagious at any time, and which might finally destroy the eye: this is a mistake, the purulent ophthalmiæ rarely lead to a granulated state of the lids. If you recollect the state of an infant's eyes, suffering from purulent inflammation, you will admit that you never find them granular; and if the nurse contracts the disease from the child, as many nurses do, she may, and generally will, become blind, but she does not usually get what is called a granulated state of the lids. The acute disease which destroys the eyes of soldiers in a

few days, does not generally lead to a granulated lid. It is the common severe catarrhal inflammation, accompanied by muco-purulent discharge; and another disease, which we have not yet mentioned, the erysipelatosus, which give rise to this peculiar state of the lids.

This point became matter for investigation before a committee of the House of Commons, some years ago. It sat six weeks, and its members had a pretty good dose of infection and contagion; and in spite of various efforts made to convince them of the difference between an escharotic and a caustic, they never could make it out. They did make out, however, in the most satisfactory manner, that there was no such thing as a resident contagion capable of existing in a dormant state for years, and of being resuscitated on the application of an exciting cause. They also satisfied themselves that the worst cases of thickened and granulated eyelids arose from the common muco-purulent inflammation of every country. The case on which Sir William Adams relied most to prove the fact of the contagion, and of the granulated lid being the result of this contagious purulent inflammation, was that of a serjeant of the 40th regiment, who had been sent home from Spain as incurable.

The moment I heard the man say from what division of the army he came, and what time he left, I knew he must have passed through my hands, and I was not a little pleased to hear him say further, that the general doctor was a hard-hearted man who scolded him, and treated him very harshly; and whilst he sent two other men back to their regiments, declaring they should march, blind or not blind, he only allowed him to go to the rear, because as a non-commissioned officer must go with the party he might as well go as another, and thus some good might be got out of him. I acknowledged myself to be the hard-hearted doctor; and as the general of division to which the man belonged, and whose orderly he was at the time his eyes became sore, was one of the committee, being an M. P., I called on him to say whether he had at any time his division affected by purulent inflammation. He denied the existence of any thing of the kind. The surgeon of the regiment was summoned by the committee, and proved that the complaint was quite accidental. Under these circumstances the statement of contagion, &c. &c. could not be maintained, and the eyes of the committee were opened to the fact that the granular state of the lids was a complaint of very common and indigent origin, arising from neglect and mismanagement, and not from any peculiar Egyptian contagion.

It was on this subject that the late Mr. J. Pearson was examined by the committee, touching the length of time a contagious principle might lie dormant in a part or sore, and then again break out with renewed vio-

lence? Some of the younger part of the committee thought themselves more conversant with the contagious properties of another disease, than with that of sore eyes; and as a committee of the House of Commons is a sort of high pressure steam-engine capable of working every thing duly brought within its reach, they did not hesitate to change the subject to the contagion of syphilis. They soon saw Mr. Pearson knew little more about sore eyes than Rhazes and the Arabians whom he quoted, but they thought he must be every thing on the other point; and I assure you they badgered him handsomely. They would not let him off any way until he had told them how long he thought it was probable a sore might continue after its first appearance, before it lost its contagious properties. The answer is deserving of attention. He said, he believed that after three months it would not retain such properties—an opinion which I think you will not find even alluded to in any of his works, and which nothing but this screw of a committee of the House of Commons could have elicited. The members were delighted at having such a person to examine; whether there might be a little selfish feeling in the case, or they were delighted to get an opinion gratis, I know not, but they certainly would not have let him off without the whole history of the venereal disease, if he had not declared he was not well, and must positively retire. He settled, however, the point of contagion lying dormant for years, and then shewing itself in the original part.

When an eyelid is to be examined, the patient should be desired to keep it quiet, to make no resistance, and particularly to avoid elevating the eyebrow, whereby the lid is put on the stretch. The surgeon then takes the eyelashes of the centre of the lid, in a very firm but gentle manner, between the fore finger and thumb of one hand, whilst he places a probe on the lid, just above the upper edge of the tarsal cartilage with the other. The edge of the lid being now gently pulled down, is easily everted, and the inside perfectly exposed. In the natural state of parts, the conjunctiva lining the lid has a yellowish appearance, with very few vessels on it, running perpendicularly downwards. When slightly inflamed, it becomes generally red, and soon assumes a highly injected appearance, very much resembling the villous state of an injected foetal stomach; a stage further, and these little villi run into each other, giving rise to larger and more distinct elevations, resembling so much the granulations of a healing sore, that they have been so named; and although the propriety of it has been disputed, it answers the purpose better than any other, of bringing at once the state under the comprehension of the surgeon, who may not be well instructed on these points. This new growth is principally confined to the part of the conjunctiva which plays over the globe

of the eye, and causes an irritation tending to the slow but almost certain disorganization of the cornea. It becomes first muddy, then opaque, and loaded with red vessels, soft in its texture, and prone to ulcerate on the application of any cause capable of exciting fresh inflammation. Small spots may be observed all over its surface, or one or more larger ulcers may either penetrate, giving rise to protrusion of the iris, or to indelible leucoma, of greater or less extent. Nature is rarely capable of effecting a cure, without the assistance of art, and never does so unless under very favourable circumstances. The best way of removing these excrescences, is by stimulating them, so as to give rise to their absorption. The ancient surgeons used to cut them. Sir William Reid recommended this to be done 120 years ago; and lately Sir W. Adams did the same. It ought not, nevertheless, to be done, for it always leaves a cicatrix or scar, which remains ever after uneven, if not rough, producing an evil, only inferior to that it was intended to remove. I disapprove even of mere scarifications, as they often leave similar marks. Of the stimulants usually employed, viz. the argentum nitratum, and the sulphas cupri, the latter is the better. The argentum nitratum gives more pain for hours after its application than the sulphate of copper, and is more likely to excite inflammation of the eyeball. It must be used as a caustic, and consequently the ointment composed of it does not answer. The sulphate of copper, when used, must be rubbed on the excrescences until it changes their colour, making them blackish, from the little bleeding which is apt to take place. In fact, it must be used as an escharotic. The sulphate of copper must be quite smooth, and the eye should be syringed out with water, and a little oil dropped into it. The patient should then constantly apply, for two or three hours, cold water, and if inflammation ensues, it must be treated by cupping, purging, &c. The process is often a long one, and requires great care and attention. It will be found that as the eyelid becomes smooth, the cornea clears, until at last vision is recovered. When the disease has been of long standing, the recovery is scarcely ever perfect, and the patient is very liable to suffer from a relapse of inflammation.

ZINC.—Pipes are now employed for cold and hot water, and plates of this metal are substituted for lead and slates in roofing houses, both in Britain and on the Continent. The great advantages of these plates are their lightness, being about one-sixth part of the weight of lead, and their not rusting.—*Brewster's Journal.*

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,
During the Session of 1831-32;
BY BARON DUPUYTREN,
PRINCIPAL SURGEON OF THAT HOSPITAL.

*Various species of Cataract, Iritis, Retinitis—
Dislocation of the Lens.*

THE study of the complications of cataract is highly necessary, as they augment more or less the difficulties of operation. One of the principal and most common is the contraction of the pupil. The professor has seen many examples at the Hotel-Dieu; and it is sometimes such that the pupillary aperture does not admit the passage of the needle in cataract. This contraction is often observed in scrofulous constitutions; it is produced by inflammation of the retina, recognisable by the thickening and redness. This inflammation, if attacked in time, yields to antiphlogistic measures, and to the instillation of some drops of an aqueous solution of belladonna. Another complication is the adhesion of the capsule of the lens to the posterior surface of the iris, or of the lens to its membrane, or of the iris to the ciliary circle, and finally, the displacement of the lens, &c.

In general, says M. Dupuytren, almost all the diseases which affect the crystalline membrane, the iris, the pupil, the ciliary circle, and other parts of the eye involved in cataract, are ordinarily the result of iritis, an inflammation extremely frequent, and whose consequences are more or less destructive of vision. He says that these diseases are ordinarily the effect of iritis, and many reasons tend to confirm this opinion. If we examine the adhesions which exist between the capsule of the lens and the iris, we observe that the vessels principally proceed from the last; and it is probable that the former is consecutively affected. Moreover, if we remember that three-tenths of the membranous cataracts proceed from external violence applied to the globe of the eye, or from a scrofulous affection of this organ, our opinion becomes more probable. Finally, if we observe with attention the anatomical structure of the eye, and above all, the disposition of the blood-vessels; if we remark that the plexus of vessels is situated within, and not without, the conjunctiva; that the inoculations of the small vessels between them are extremely numerous, and form a species of zone at the point of junction of the sclerotic and the transparent cornea, penetrating the former to extend to the iris, and in this way we can

explain how an ophthalmia, that has its primitive seat in the conjunctiva, may ultimately communicate with the iris, and cause the accidents of which we have spoken. This is true with respect to alterations of the crystalline, and is not less for the other lesions of the eye. A slight inflammation of the iris produces two remarkable phenomena—contraction of the pupil, and a deposition of a small quantity of lymph on the anterior part, filling the space which separates it from the crystalloid membrane. This quantity of lymph may be increased, cover the pupil and fill up the anterior chamber. It follows that if nothing arrests the disease a false membrane will be organised, and form adhesion between the tissues; or the pupil will be obliterated, or the iris will adhere to the capsule of the lens.

When there is iritis, or contracted pupil, it is necessary to attend to either disease. It often happens that idiopathic iritis is followed by sympathetic retinitis. This last is very common, much more than is generally thought. There is scarcely a week (continues the professor) that we do not observe certain examples, either in the wards or in public consultations; it is particularly observed in scrofulous infants. When these are brought into this amphitheatre we can readily perceive their disease; they advance with an uncertain step, the hands placed before the eyes to protect them against the brightness of day; and when they arrive before the window they make a slight movement to turn the head to the opposite side, and they apply the hands forcibly on the organs of vision. When we desire such children to remove their hands, they only apply them with greater force; when we attempt to remove them, they apply them with more force; if we open the lids, they oppose us with all their strength; and, finally, when we succeed in opening the eye, the sufferer cries loudly, and the organ of vision is turned up involuntarily under the upper lid, and the lucid cornea is hidden; they have the utmost horror of light. Whence comes this hemerophobia? What is the reason that the slightest ray of light causes such acute pain? Assuredly we cannot seek for the cause in the tissues of the eye, which are completely deprived of sensibility. Is it caused by iritis? But this inflammation may exist to a high degree without this phenomenon. It ought, therefore, necessarily to be admitted, that it consists in inflammation of the retina of this nervous membrane, endowed with exquisite sensibility, charged to receive and transmit the rays of light. The irritation of this organ re-acts on the iris, and produces that contraction of the pupil which is so often, as we have said, considered characteristic of iritis. There is this difference between the two cases, that in one the contraction of the pupil is the consecutive effect of iritis, and in the other the immediate effect of an idiopathic affection of the iris. This is

the distinction; this explains the profound horror of light, or photophobia, of which we have spoken.

A complication of cataract, of which we have yet to speak, is one that renders an operation illusory, and this is paralysis of the retina. It is of great importance to verify at first this lesion, in order not to attempt a useless operation, and to expose the patient to serious accidents which may result. In the absence of all other disorder (such as the adhesion of the capsule of the lens to the posterior surface of the iris) to which we can attribute the immobility of the pupil, this last sign is, in general, less equivocal. But, in some individuals, we can discover certain peculiarities proper to establish it, until there is an absolute certainty, there is a strong presumption of the existence of this paralysis. A young man, about 28 years of age, is now in the Hotel-Dieu, with an accidental membranous cataract, that is to say, one produced by an accident, a contusion received on the anterior part of the eye. The crystalline capsule is not entirely altered; many points on its surface, and also on the lens, are transparent; nevertheless vision is completely abolished, and he cannot distinguish day from night. A woman, upon whom the professor operated on the 16th December, offers a contrary example. The lens is completely opaque, the faculty of vision exists in a feeble degree, the patient can distinguish light from darkness. Whence comes this singular difference, asks the professor? What is the obstacle with the young man that opposes the perception of the luminous rays? We must conclude the existence of some other disease besides simple cataract; and, in fact, we have strong reason to believe that the cause of this phenomenon consists in a paralysis of the retina; there is little hope, therefore, of restoring vision. Nevertheless the man desires the operation, in order to remove the deformity. I have often seen (says the professor) several persons, especially women, come and request the operation in analogous circumstances, without the hope of recovering vision, and for the sole end of getting rid of the deformity which disfigures their features. In one case the realization of a marriage was the motive. I have sometimes yielded to these considerations, and no accident followed. Similar motives are too frivolous for a man, who can live without inconvenience with cataract, and we ought not to perform the operation unless there is a probability of success.

However dexterously the operation for depression of a cataract is performed it is liable to failure, as the lens may regain its original situation, and obstruct the passage of the luminous rays to the retina. The efforts of coughing, inconsiderate movements of the sick, and a thousand other causes, too long to enumerate, produce this result. It is difficult

to express the grief of patients who have regained their vision and soon after lose it.

In some cases in which the cataract had re-ascended, M. Dupuytren has operated four times, at the interval of some months; and he has remarked, that the danger of the operation is diminished according to the frequency of its performance on the same individual. In such cases he has almost always found the lens softened and flocculent on its surface, proving the action which the absorbents had exerted upon it, a case of which was lately seen at the Hotel-Dieu.

Sometimes a part of a depressed cataract ascends, the remainder having been absorbed. This was seen in an old man on whom the baron operated on the 16th of this month.

When cataract is divided or broken up it may re-appear behind the pupil, and its parts become re-united. The absorption of this form, which may be named cataract by agglomeration, very readily takes place, and in proportion to the age of the patient, which has of course great influence on absorption, as already stated. Some of these fragments continue for a long time to withstand absorption, and may require to be removed from the axis of the visual rays.

Every one knows the function of the crystalline lens, and that if it is taken away, depressed, or destroyed, vision will never be restored to its normal condition. Certain myopes, or short-sighted persons, regain by the subtraction of the lens their normal state of vision; but the presbytes, or long-sighted, have more difficulty than before the formation of cataract. These have need of an artificial lens placed before the eye to supply the want of the lens after its removal. The use of glasses ought not to be permitted to a patient for a long time after the operation, otherwise the intensity of the impression they determine will induce inflammation, and may destroy the fruits of the operation, as I have often observed.

The opaque crystalline lens may be displaced by a blow on the eye or head, and escape into the anterior chamber, or become impacted in the pupil. This has been observed during the operation of depression, and it is right to mention that some persons possess a power of pushing, at will, the lens from one chamber to the other. The most remarkable examples of this last power were cited by the professor from the *Traité des Maladies des Yeux*, by M. Demours, of which the history may be briefly given:—"I have sometimes (says this author) observed the opaque crystalline lens pass through the pupil into the anterior chamber and return to its original situation. Some patients could execute at will this alternative displacement. MM. Tillard and Bushnel were with me on the 3d July, 1817, when M. Gastel, who was affected with cataract, passed the lens in their presence into the anterior chamber, and afterwards behind the iris. He was 31 years

of age, of a good constitution; the right cataract was dated from the age of six years, and had descended by little and little behind the iris; about puberty it was invisible for eighteen years, and was plunged in the vitreous humour. It passed through the pupil during his military duties, and caused such continued pain that he was discharged from the service. I proposed extraction, but he declined the operation; I advised him to instil some drops of an aqueous solution of the extract of belladonna into the eye to dilate the pupil, and to facilitate the return of the lens behind the iris; and in order to favour this passage he was to lie on his back for 24 hours, the head being so that the summit is lower than the neck; and finally to instil some drops of vinegar into the eye to excite slight inflammation, so as to close the pupil and render it smaller than before the use of the belladonna, a proceeding which I have employed in certain cases with success. He remained eight years and a half free from any return of his complaint, which returned in two years afterwards every three or four months. If he depresses his head suddenly, the lens passes into the anterior chamber, and he replaces it by lying on the ground, his chin elevated, the crown of the head depressed, and rubbing the superior lid with the finger. I will probably extract it some day."

We conceive (continues the professor), that all the antiphlogistic varieties necessitate various modifications in the manual operation, or in the treatment, according to their causes and their nature. If contracted pupil is the product of acute inflammation, antiphlogistics, leeches to the angle of the eye, cupping the temple, and, above all, bleeding in the foot, will suffice for its dissipation; but if the affection is in a chronic state, these means will produce no beneficial result; then we must employ frictions, with the extract of belladonna, and, above all, the water of lauro-cerasus, with the object of dilating the pupil and facilitating the operation.

Observation has apprised me that cataracts, accompanied with contracted pupil, are usually complicated with adhesion of the crystalloid membrane to the posterior surface of the iris. When such adhesion is recent, belladonna will destroy it, and we should operate; but if the union is firm, and does not yield to this remedy, we must destroy it with the needle before depressing the lens. A disease of the iris to the ciliary circle presents great varieties in different individuals; in some it is so extensive and intimate, that it is separated with great difficulty, as when we wish to produce artificial pupil; with others, the iris tears sooner than it separates; and with more it is detached with a slight effort.

In all cases of displacement of the lens, whether it be opaque or not, the professor admits, as a general rule, that unless it causes inflammation, it should be left in its situation, but when it causes this accident, we should

operate; in fact, when it is not opaque we gain nothing by extracting it, but, if on the contrary, we must depress it. When the crystalline lens is forced into the vitreous body it must be left there, in order that it may be removed by absorption; and when it is in the anterior chamber the operation is easy and simple. In most cases we practise a small incision of the cornea, and the foreign body escapes by itself, or we can extract it with a needle. Such is the general practice.

But M. Dupuytren was the first to deviate from this plan, in operating on a case of this kind in 1819, in an unpractised manner, which to that time was without example. A soldier, aged 34 years, was admitted into the Hotel-Dieu, Nov. 2. The lens was in the anterior chamber, and had been so placed by a sudden depression of the head; the eye was inflamed and lachrymose, and cephalalgia was intense. Venesection, a bath, and a purgative, diminished these symptoms, and in two days afterwards he performed the operation in the following manner:—

The patient was lying in his bed, the head elevated; the needle was introduced about two lines from the union of the transparent and opaque corneae, and was passed into the posterior chamber; it penetrated the anterior, hooked the lens, made it pass into the posterior chamber, at the bottom of which he depressed it into the vitreous humour, and then withdrew the needle. The patient could see the hand which afforded him light, and could distinguish those who assisted at the operation. The consequences were fortunate. The man quitted the hospital in six days afterwards, having the pupil perfectly natural, seeing well, and suffering no pain.

[Such are the principal ideas of M. Dupuytren on cataract. Should examples be afforded of exemplifying those generalities in the subsequent lectures, they will be faithfully reported. It is necessary to make this statement, as some parts of this lecture were abridged, especially the details of the cases, which were given with the greatest minuteness, but which were omitted because the *Medical and Surgical Journal* professes to give selections from lectures, or merely what is of most importance.—*Rep.*]

THE ANATOMY BILL.—This bill was partly considered in the House of Commons on Wednesday night, when several clauses were changed. It is to extend to Ireland. Several frivolous objections were offered and rejected. The House adjourned to this day (Thursday), when the discussion on the clause authorising the sale of dead bodies is to take place. Sir Robert Peel, with his characteristic good sense, supported it, as the only means of defeating the resurrectionists, whom he properly designated the most degraded of the human race.

AN INQUIRY
INTO THE
INFLUENCE OF THE MIND AND
PASSIONS ON THE BODY,
IN THE PRODUCTION OF DISEASE.

“Should the body sue the mind before a court of judicature, for damages, it would be found that the mind would prove to have been a ruinous tenant to its landlord.”---*Plutarch*.

“Decet affectus animi neque se nimum erigere subjacere servititer.”

THERE is no subject within the whole range of medical literature so little investigated, and, consequently, so little understood, as the influence of the mind and passions in the production and aggravation of disease. It is a subject not merely of speculative, but of practical importance. It is a subject as replete with interest to the physician as to the metaphysician and moralist. Hitherto medical writers, in their researches into the causes of a phenomena of disease, have paid but little attention to the influence of the intellectual over the *material* portions of our nature. Satisfied with a knowledge of the *physical*, they have too much neglected the mental or moral causes of disease.

Experience, our only sure guide in medical inquiries, instructs the physician that a diseased condition of the body produces an alteration in the condition of the mind, and that certain emotions of the soul, whether of a pleasurable or painful nature, are universally attended with reciprocal alterations in the bodily functions. Descartes observes, that the soul is so much influenced by the constitution of our bodily organs, that if it were possible to find out a method of increasing our penetration, it should certainly be sought for in medicine. The connexion between the body and mind is, in fact, so strong, that it is difficult to conceive how one of them should act, and the other not be sensible, in a greater or less degree, of that action. The organs of sense, by which we acquire all our ideas of external objects, when acted upon, convey the subject of thought to the nervous fibres of the brain; and while the mind is employed in thinking, the part of the brain is in a greater or less degree of motion; a large quantity of blood is transmitted to the brain, the action of the arteries become increased, and the nervous system sensibly affected.

Plato has remarked, with reference to the influence of the mind on the corporeal frame, “Where the action of the soul is too powerful, it attacks the body so powerfully that it throws it into a consuming state; if the soul exerts itself in a peculiar manner on certain occasions, the body is made sensible of it, for

it becomes heated and debilitated.

Italian physician also observes on this subject, that the union of the soul with the body is so intimate, that they reciprocally share the good or evil which happens to either of them. The mind cannot put forth its powers when the body is tired with inordinate exercise, and too close application to study destroys the body by dissipating the animal spirits which are necessary to recruit it.*

The knowledge of the influence of the passions of the mind over the bodily functions, is of ancient date. Plato, in his “*Timaæus*,” states it as his firm conviction, that the spirit exerted a marked influence in producing disease. This opinion was afterwards revived by Helmont, Hesper Dolæus, and Stahl; the latter plainly says, that the rational soul presides over and directs the animal functions. In this doctrine he was followed by Nichols, in his “*Anima Medica*.” According to the doctrines of Stahl, the disorders of the body proceed principally from the mind; and, according as it is variously affected, it produces different effects (diseases.) Hence, when the mind, which animates the most robust and best organized body, is violently agitated by fright, rage, grief, vehement desire, or any other passion, whether sudden, or attended by long and painful sensations, the body manifestly suffers, and a variety of diseases, as apoplexy, palsy, madness, fever, and hysterics, may be the consequence. If this be true, an attention to the regulations of the mind is of much more importance than physicians seem disposed to admit. The poet of health justly says:—

“’Tis the great art of life to manage well
The restless mind.”

In the course of this vitally important and deeply-interesting subject of inquiry, it is not my intention to enter into any metaphysical discussion respecting the inscrutable and mysterious union existing between matter and mind, or to endeavour to point out the manner in which the body influences the mind, and the mind the body. Such subjects we do not think to be legitimate objects of inquiry. The medical philosopher is engaged in less obscure and less uncertain researches; he does not attempt to solve the question regarding the intimate union subsisting between the natural and intellectual portions of our nature, but he wisely confines himself to an attentive examination of the phenomena which result from that union. Man is compounded of a soul and body, so closely united, not *identified*, that they frequently struggle and occasionally overpower each other. Sometimes the mind ascends the throne and subdues, in a moment, the physical energies of the most powerful of her subjects. At other times the body gains the ascendancy, and lays prostrate before her the mightiest of

human intellects. Instances illustrative of both propositions are of daily occurrence. It has been said of Sophocles, that being desirous of proving that at an advanced age he was in full possession of his intellectual faculties, he composed a tragedy, was crowned, and died through joy. The same thing happened to Phillippides, the comic writer. M. Juventius Thalma, on being told that a triumph had been decreed to him for having subdued Corsica, fell down dead before the altar at which he was offering up his thanksgiving. Zimmerman, in his work on Experience in Physic, has related the circumstance of a worthy family in Holland being reduced to indigence; the elder brother passed over to the East Indies, acquired considerable fortune there, and returning home presented his sister with the richest jewel: the young woman, at this unexpected change of fortune became motionless and died. The famous Forquet died on being told that Louis XIV. had restored him to his liberty. It is also related of Diodorus Chronos, who was considered as the most subtle logician of the time of Ptolemy Soter, that Stilbo one day, in the presence of the king, proposed a question to him, to which he was unable to reply. The king, willing to cover him with shame, pronounced only one part of his name, and called him *ovos*, ass, instead of Chronos. Diodorus was so much affected at this as to die soon afterwards.

Perhaps there is not a more remarkable instance on record showing, in a melancholy though forcible light, the dominion of mind over the material frame, than the circumstances which attended the death of John Hunter. This distinguished surgeon and physiologist died in a fit of enraged passion; and, what is somewhat extraordinary, he had often predicted that such excitement would prove fatal to him. He died at St. George's Hospital, Oct. 16, 1793, under these circumstances: being there in the exercise of his official duty as surgeon, he had a warm dispute with Dr. Pearson on a professional subject; upon which he said, "I must retire, for I feel an agitation which will be fatal to me if I increase it. He immediately withdrew into an adjoining room; but Dr. Pearson, not being willing to give up his argument, followed him, which so annoyed Hunter, that he vehemently exclaimed, "You have followed me on purpose to be the death of me! You have murdered me!" and instantly fell and expired! Mrs. Byron, the mother of the noble bard, is said to have died in a fit of passion. Mr. Moore, in his life of Lord Byron, in speaking of Mrs. Byron's illness, says,—“At the end of July her illness took a new and fatal turn; and so sadly characteristic was the close of the poor lady's life, that a fit of ague, brought on, it is said, by reading the upholsterer's bills, was the ultimate cause of her death.” A somewhat similar circumstance is recorded of Mal-

branche. The only interview that Bishop Berkley and Malbranche had was in the latter philosopher's cell, when the conversation turned upon the non-existence of matter, and Malbranche is said to have exerted himself so much in the discussion that he died in consequence. Sanctorius relates an instance of a famous orator, who so far exerted his mind in delivering an oration that he became, in a few hours, quite insane.

The effect of a too close application of mind to study on the bodily health has long been a matter of common observation. The Roman orator, Cicero, points out forcibly the dangers arising from inordinate exertion of mind; and he has laid down some rules for guarding against the effects of study. M. Van Swieten, in alluding to this subject, relates the case of a man whose health was severely injured, by what he calls "literary watchings." Whenever he listened with any attention to any story, or trifling tale, he was seized with giddiness; he was in violent agonies whenever he wanted to recollect any thing which had slipped his memory; he oftentimes fainted away gradually, and experienced a disagreeable sensation of lassitude. Rousseau has very justly remarked, that excessive application of mind "makes men tender, weakens their constitutions, and when once the body has lost its powers, those of the soul are not easily preserved. Application wears out the machine, exhausts the spirits, destroys the strength, enervates the mind, makes us pusillanimous, unable either to bear fatigue or to keep our passions under." *

Shakspeare appears to have formed a just conception of the great injury which the corporeal frame experiences from a too close application of mind. The immortal bard observes,—

“— Universal plodding poisons up
The nimble spirits in the arteries;
As motion and long-during action tires
The sinewy vigour of the traveller.”

Love's Labour Lost.

In the Consultations of Wesper we find related the history of a young man of family, 22 years of age, who, having applied himself incessantly to intense mental exertion, was seized with a fit of insanity, in which fit he wounded several persons and killed his keeper. Catalepsy has been known to have been produced by great mental application. Fomelius gives us a remarkable instance of it. A man (says he) who passed whole nights in writing and studying, was suddenly attacked with a fit of catalepsy: all his limbs stiffened in the attitude he was in when the disease first seized him. He remained upon his seat, holding the pen in his hand, and with his eyes fixed on his paper, so that he was considered to be still at his studies, till

* Preface de Narcisse [Œuvres] Diverses, t. 1, v. 172.

being called to, and then shaken, he was found to be without motion or sensation.*

Many extraordinary instances are on record, of remarkable changes having been produced in birds by an affection of the animal passions. The following fact is related by Mr. Young, in the *Edinburgh Geographical Journal*. A blackbird had been frightened in her cage by a cat; when it was relieved, it was found lying on its back, quite wet with perspiration. The feathers fell off, and were renewed, but the new ones were perfectly white. Some similar facts are recorded in a popular periodical. A remarkable change of colour in a lark, belonging to Dr. Thomas Scott of Fanish, occurred under my own eyes, and which, I have no doubt, was produced by *grief* at being separated from a mavis. Their cages had long been side by side in the parlour, and often had they striven to outrival each other in the loudness of their song, till their minstrelsy became so stunning, that it was found necessary to remove the laverock to a drawing-room above stairs. The poor bird gradually pined, moped, and ceased its song; its eyes grew dim, and its plumage assumed a dullish tint, which, in less than a fortnight, changed to deep black. The worthy physician watched with the eyes of a naturalist this phenomenon; but, after a while, fearing for the life of his favourite, he ordered it to be replaced along side of its companions. In a short time it resumed its spirits and song, but after every moulting the feathers were of the same black colour.†

A similar phenomenon has been observed in the human species, who have been exposed to the effects of inordinate passion. Borrelli relates the case of a French gentleman, who was thrown into prison, and on whom fear operated so powerfully as to change his hair completely grey in the course of one night. Dr. Darwin ascribes this phenomenon to the torpor of the vessels, which circulates the fluids destined to nourish the hair. Nothing will, perhaps, demonstrate more fully the effects of moral causes in producing disease than the structural alterations discoverable in the bodies of those who have died whilst labouring under nostalgia, or the Swiss malady. This disease is considered peculiar to the Swiss, and is occasioned by a desire of revisiting their own country, and of witnessing again the scenes of their youth. This desire begins with melancholy sadness, love of solitude, silence, bodily weakness, &c. and is only cured by returning to their native country. Avenbrugger says, that in dissecting the bodies of those who have died in consequence of this disease, organic lesions of the heart generally are detected. A particular musical composition, supposed to be expressive of the happiness of the people, is in great vogue in Switzerland. If this tune or

piece of music is played among the Swiss in any foreign country, it tends strongly to recall their affections for their native soil, and their desire of returning, and to induce the desire called nostalgia consequent on their disappointment. The effects of this musical composition is so powerful, that it is forbidden to be repeated in the French camp on pain of death, it having at one period had the effect of producing a mutiny among the Swiss soldiers, at that time in the employ of the French king.

Predictions of death, whether supposed to be supernatural, or emanating from human authority, have often, in consequence of the poisonous effects of fear, been punctually fulfilled. The anecdote is well attested, of the licentious Lord Littleton, that he expired at the exact stroke of the clock, which, in a dream or vision, he had been forewarned would be the signal of his departure. In Lesanky's voyage round the world, there is an account of a religious sect in the Sandwich Islands, who arrogate to themselves the power of praying people to death. Whoever incurs their displeasure, receives notice that the homicide litany is about to begin, and such are the effects of the imagination, that the very notice is frequently sufficient with these people to produce the effect.

Thousands of other instances might be cited, illustrative of the fatal effects of inordinate indulgence in passion, but we are convinced that the cases already alluded to will be sufficient to convince the physician of the importance of the subject which we have attempted to elucidate. It has been well observed, that medical cannot be separated from moral science, and that a correct knowledge of the phenomena of mind, and of the anatomy of the passions, and their diversified effects on the animal œconomy in a state of health and disease, is as necessary to the right appreciation and treatment of disease, as the knowledge of anatomy is to the surgeon.

It is difficult to say which organ the passions act more particularly on. We find, upon examination, that no organ or part of the body is beyond the influence of the passions. We find that sudden joy or grief will immediately so affect the stomach as to destroy all sensations of hunger; and Mr. Abernethy says, in allusion to this subject, "You may daily see the affections of the mind, as perplexity, fear, anxiety, and grief, never fail to disorder the functions of the stomach and bowels. You must have noticed how much the cerebrum influences the stomach, and the stomach the cerebrum. You may consider this subject one of the greatest importance in the practice of your profession." We find the passions acting upon the uterine system, the hepatic system, and the vascular and nervous system; in fact, when we come closely to consider the close relationship existing between the vascular and nervous, and the

* *Pathol. lib. 3, cap. 2, Oper. Omm. p. 406.*

† *Mirror of Literature for April 19, 1831.*

dependance of the organic functions on the state of the nerves, we need have no cause to wonder at the structural and functional derangements consequent on violent mental emotions. Every part of the body is connected to the brain and spinal marrow by the medium of nerves; therefore any agitation of mind, producing an affection in the origin of the nervous system, must necessarily produce more or less derangement of the numerous organs of the body. The nerves are the channels through which all moral emotions travel. Anger frequently deranges the liver to such a degree as to give rise to jaundice. Spasmodic and convulsive affections frequently owe their origin to an affection of the imagination. Mania is frequently produced by mental agitation. Georget states that the causes which tend to derange the organization of the brain by the exercise of its own functions, are the most frequent; or, we might almost say, the only one capable of producing mental aberration. This is demonstrated by the tables published by various authors, as Professor Pinel, M. Esquirol, Tuke, &c. There is a species of vomiting denominated by the French pathologists "nervous vomiting," caused frequently by affections of the mind. "One of the most striking instances of these nervous vomitings," says Andral, "is that recorded by M. Louyer Villermay. The subject was a woman, who, in consequence of a *disappointment in love*, was attacked alternately with globus hystericus, dyspnœa, and palpitation. She uttered involuntary cries, and at last was seized with vomitings, which were treated in vain by the antiphlogistic method. She was at last cured by the *vinum absinthii*." The passions may be divided into those that rouse and those that depress the powers of life. The passions, such as fear, love, anxiety, and all the depressing passions, ought to be carefully avoided by those labouring under diseases, either caused by a debilitated state of the constitution, or in which debility is the principal symptom. These passions act by exhausting the nervous energy, and, therefore, must materially weaken the organic functions, as their healthy state depends upon the proper supply of the principle which we, for want of a better term, call *nervous*. Therefore, in those maladies which depend upon a low state of the nervous system, nothing acts so beneficially as stimulus applied to the mind. Its effects upon the physical health is astonishing. Mr. Madden, in his narrative to the East, says, "In Alexandria I have seen whole troops of negro soldiers carried off after a few days illness, from the effects of cold. In this mortality, however, moral depressing causes had much to do; the Arab had no resource within himself to resist a hardship of which he had no previous knowledge; the negro had no moral courage to invigorate or revive him when the change of climate made him sick, or the sea-

breeze made him shiver; and nothing but the strong exertions of mental energy can counteract the ill effects of a vicissitude of climate on the feeble frame of man. In my own practice among Europeans, I have had painful experience of the fatal effects of mental exhaustion, of irritability of temper, and of timidity of spirit."

Those predisposed to inflammatory complaints, to apoplexy, and other diseases arising from, or aggravated by, a plethoric state of the constitution, should carefully avoid all the exciting passions, such as anger, fright, terror, &c., which excite an inordinate action of the nervous system, which frequently gives rise to inflammatory diseases. Inflammatory fevers, apoplexy, hæmorrhage, and local inflammations, have been known to arise in consequence of great mental excitement. On the other hand, typhus fever, intermittent fever, and other maladies, depending for their existence on a low state of the vital powers, are aggravated by those passions which depress the nervous system. It is the *abuse* and not the *use* of the passions that acts thus injuriously on the constitution. While the impressions made upon the nervous system by the passions are moderate, and restrained within due bounds, by a natural gratification of the passions, guided and controlled by reason, the effect produced upon the system is rather of a beneficial than a pernicious nature. The passions strengthen muscular motion, keep up the circulation of the blood, produce the natural secretions, and excite a man to such exercises and actions, calculated to promote the health and life of the individual. But when the pain excited by the passion is too strong and violent, and the passion not gratified, or not moderated or overruled by reason, such a violent and continued stimulus will drive too great a quantity of blood to the stimulated organ, by which the vessels will be overcharged, and disease will be the consequence.

From this imperfect sketch of this vitally important subject, enough, we conceive, has been adduced to convince the medical practitioner, that medical cannot be separated from moral science, that the knowledge of the anatomy of the passions, and their diversified effects upon the human body, both in the state of health and disease, is as necessary to the right appreciation of disease, as the knowledge of anatomy to the surgeon; and that without an intimate acquaintance with the influence of the passions and imagination over the corporeal frame, the physician cannot successfully contend with disease, nor can be said to be properly acquainted with the art which he professes to practice.

DISTORTION OF THE FINGERS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

IN your selections from the clinical lectures of Baron Dupuytren, upon permanent retraction of the fingers, I find the following passage:—"The different opinions, as to the cause of this affection, have led to much uncertainty as to the therapeutic means; many thought it beyond the powers of art. *M. Bornali consulted Sir Astley Cooper for an Italian, named Tersori, who laboured under this deformity, and the CELEBRATED ENGLISH SURGEON held that the disease was incurable.*" Sir Astley Cooper was, in all probability, justified in declaring the case upon which he was consulted incurable; but Baron Dupuytren is not, THEREFORE, justified in saying, that similar distortions are incurable by other surgeons, because he does not know what means they would employ to cure the said disease.

It has been my fortune to cure more than thirty cases of those distortions which Baron Dupuytren has described, and to be consulted in many others for which I was not allowed to attempt any thing. Of those which I did cure I will select three, of different degrees of intensity, to explain so much of my treatment as you can afford room for in your Journal.

The first was a gentleman, whose right hand was contracted, and firmly fixed in the form and position the hand takes when we hold a pen to write. He had no power to give the rotary motion to his hand, but he could move the hand laterally from one side to the other by the joint at the wrist, and he could still bend and extend his fore-arm by the natural action of the elbow-joint; and he had the full use of the arm at its junction with the scapula. He could not refer to any cause which could have produced this effect, but as his fingers were gradually increasing in rigidity, and the motive powers of his fore-arm were, at the same time, diminishing, and he had consulted many who afforded him no relief, he applied to me as a last resource, and I, holding out to him the strongest hopes, he trusted himself to my care, and I cured him completely. I had the satisfaction of knowing him more than twenty years afterwards, with his hand completely well, and he may, for any thing I know to the contrary, be still alive.

The next was a young lady, about twelve years old. No cause could be assigned for her defect, which made its first appearance three or four years before I saw her. At that time the fingers of her right hand had gradually contracted, so that she could not extend them by any exertion of the voluntary muscles. The hand was kept constantly closed, and, when an attempt was made to open it by force, the fingers, after being a little extended, became painful, from the effect on the flexor tendons. The wrist had the same feeling;

and, consequently, the hand became useless, and, in that state, was allowed to hang by her side. When this defect began to appear it was merely a little weakness in her fingers, accompanied by an unwillingness to use them; but it continued to increase till I saw it. On its first discovery professional advice was asked; and as is too frequently the case, it was said to be a mere trifle, which would disappear of itself without any thing being done for it. That prediction not having been verified, another physician was consulted; he spoke with me on the subject, and, in consequence of what I said, advised that I should be employed. The family, rank, and fortune were such, that they could command the attention of any professional men they chose. The lady told her first surgeon what the physician had advised; he said, if that is the case, send Mr. Sheldrake to me, at my own house, early in the morning, I shall then, have time to attend to him, *and will direct him what to do.* I went, by order; the great man gave his own account of the case, and said, all that would be necessary was to make a flat board to the shape of the arm, with the hand extended. This was to be bound on to the arm with straps; holes were to be made in the board corresponding with the fingers; tapes were to be put through these holes and passed over the fingers, which were to be drawn nearer and nearer to the board till they become quite strait. This, he said, was all which was necessary; it was the commonplace-thing which had been tried a thousand times and always found useless.

Having had no previous communication with this gentleman, he was not acquainted with my practice, of which I was glad to explain the advantages. I shewed him the means I employed, and detailed the particulars of my practice, mentioning three similar cases, which were, at that time, under my care, and which I would shew if he would be pleased to examine them. He pronounced it all nonsense, adding that nothing should be done in this case but what he had already directed. This being his determination I took my leave politely, and withdrew all farther attendance on the patient.

Some time afterwards I met my first friend, who asked why I neglected the patient he had recommended to me. I candidly told him the particulars. He said I will arrange it so as to attend with you, and see that you have justice. He did so, and the patient was cured. When she was almost well, her mother said, "Now, Mr. Sheldrake, though you objected to Dr. — attending my daughter with you, I intend him to come here, and see how well you have succeeded." My answer was "I will save your ladyship that trouble. When I waited upon him, by your orders, I shewed him all the contrivances you have seen me use, explained my mode of treatment, and offered to shew him similar patients who were then under my care. He refused to look at

them, declared it all nonsense, and nothing should be done but what he had directed. It was not my business to complain; but I did not come to you again till Dr. — arranged the matter on a proper footing; you see what has been the effect, and, as I have now given you the undisguised opinion of Mr. — you will not think it necessary to ask it again." Nothing more then passed; but, on my next visit, Lady — said, you are strangely mistaken in the opinion you say Dr. — has of you; for, notwithstanding you refused your consent, I have shewed him what you have done, and how you manage it. He is delighted at your success, says he knows you have very great merit, and advises me to let you do whatever you please with my daughter. These details may be useful in shewing how difficult it will be for any professional man to preserve his character from injury, while men, who affect to dictate in the profession, practice such acts of baseness with impunity.

The third case is much more important, on many accounts. The wife of a respectable tradesman, by some cause not known, was deprived of the use of all her limbs so completely, that her legs, thighs, and body, were brought as much into contact with each other as was possible. Her hands had all their fingers so contracted that each hand had the appearance of a clenched fist, and her elbows were so drawn to her sides that it was difficult for her to make her hands meet when she endeavoured to fold them together over her bosom. Her head had lost much of its natural motion; she had the use of her speech and all her natural faculties, but was otherwise quite helpless; she was fed, and her clothes were changed by a servant, and she passed her life in her bed, or on a sofa, being moved from one to the other. Her health was not otherwise bad, and she still preserved very good spirits. When I first saw her she had been three years in this state, and the only probable account she could give of the cause was, that she had amused herself in painting the first floor of her house with oil-colour, and a few days afterwards lost the use of her limbs, and became more and more helpless from that time forwards. Dr. John Clarke, who was then living, pronounced it the effect of painters' colic; yet it is difficult to conceive that exposure to the fumes of white lead, for so very few days, should be so baneful in its effects. Dr. Clarke, however, acted upon the presumption that such was the fact, and treated it accordingly, for the short time he survived, without any benefit to the patient. She afterwards passed under the care of other members of the profession with no better results, though she had *quantum suff.* of mercury, bark, electricity, magnetism, warm, cold, and vapour baths, frictions, moxa, and all the farrago of infallible remedies, continually resorted to, as affording a chance of being useful, when nothing is actually known

of the complaint to which they are to be applied. At last I was consulted.

The circumstances of this case rendered it a subject for serious consideration. I had the means of applying power much greater than it would require; but the real subject to be determined was, in a case so extraordinary, whether there might be circumstances which would render the application of the power unbearable. This was submitted to the patient, who determined it should be tried. I began with her legs and feet, which, after a long and great exertion, were restored to so much of their natural form and power that she could walk about her house and garden with facility. I then tried her right hand, and restored it so far, that she could write without difficulty. She had now, she said, gained what she wanted, and would let her left hand remain as it was, and explained this by entering into the circumstances of her situation. She had, in early life, formed a connection with a gentleman, who, dying unexpectedly, had provided for her by a handsome annuity secured upon his estates; and, that no imprudent act of her own might deprive her of its benefit, specified that the money should be paid into her own hands, for her own use, independent of husband, or relation of any kind, and she should give a receipt every quarter, in her own hand writing.

With this provision she married well; but when her misfortune fell upon her she was no longer able to write, therefore those who should have paid the annuity refused to do so, unless they saw her write the receipt every quarter. This it was quite impossible for her to do, and she was thus, unexpectedly, deprived of the means which, in her then helpless condition, she was willing to submit to anything to regain; but, having effected her object, she was not willing to suffer so much pain as she knew, by experience, she must, to recover the use of her left hand, for which she had, in reality, but little serious employment. She survived, in good health, for several years.

I have put these three cases together, because I believe they contain all the facts to be found in cases of this description. The treatment of them depends upon the skilful application of certain general principles, which can only be explained by reference to the worst cases, and, without understanding which, a practitioner will not find himself equal to the cure of those which are but slight.

As I think I have written quite as much as you can give place to in one number, I will enter fully into the treatment of these cases in my next, and remain,

Yours, &c.

T. SHELDRAKE.

No. 9, Upper Berkley-st. Portman-sq.
April 5th, 1832.

Westminster Medical Society.

April 7th.

GEO. JEWELL, Esq. in the Chair.

THE Secretary, Mr. Stodart, having apologised for the absence of Mr. Murray, whose duty it was to read the minutes, commenced that office, but had scarcely done so when he was interrupted by Mr. Walker and Dr. Webster, declaring that they were incorrect. Mr. Stodart stated that Mr. Murray had told him he had sent a report to the "*Lancet*," and requested he would condense the minutes from it. He could not himself be answerable for their correctness.

Dr. Johnson said it was a bad proceeding for the Secretary to send a report of the meeting before it had been confirmed. The report in the "*Lancet*," was incorrect; he had not stated that Dr. Craigie had sent him the proof-sheets of his work, but that he had had an early copy. There were many other corrections that might be made.

Dr. Ferguson and Mr. Chinnock had never read a more incorrect account than that which had appeared in the "*Lancet*," and hoped that the Secretary would not be allowed to make such reports in future.

Mr. Greenwood inquired who reported the meetings to the "*Morning Post*?"

Mr. Chinnock observed, that the report under notice was commented on only because it was made by the Secretary.

Mr. Stodart suggested that the minutes should remain unconfirmed until Mr. Murray's return.

Mr. Chinnock could not accede to that. He thought that great disrespect had been shewn the Society by the Secretary, in sending a report to the "*Lancet*," and not drawing out the minutes for the Society.

Mr. Stodart could not be certain that Mr. Murray had sent the re-

port; he had told him that he would find it there.

Objections were raised by Mr. King to that part of Mr. Greenwood's speech which alludes to letters or communications in the papers being likely to goad on the mob to resist those who were attending on persons attacked with cholera. Mr. King observed, that had he viewed Mr. Greenwood's remark in that light he would not have allowed it to pass unnoticed.

Corrections were then made in the speeches attributed to Mr. Walker, Mr. Greenwood, and Dr. Gilkrest, after which the minutes were confirmed. Mr. King entered his protest against them.

Dr. Johnson then rose, and said, that as Mr. Greenwood had cast serious reflections on those who had written in the daily press, and he (Dr. Johnson), was one of those writers, he called on him to state whether he alluded to him as one who had goaded on the mob; and if so, to point out a single passage in his letters which could give rise to such a charge. He had always attached his name to his communications.

Mr. King reiterated the same demand in regard to himself.

Mr. Greenwood stated that the political press had been guided in its assertions by the medical men who wrote in its columns. The editor of the "*Times*" had not knowledge sufficient to form an opinion.

Dr. Johnson declared that Mr. Greenwood had not answered a single question put to him. He challenged him to bring a single quotation in proof of what he had asserted. (*Hear, hear.*) He was bound either to exculpate him, or to prove what he had said.

Mr. Greenwood said that certainly there was not a word or a sentence in Dr. Johnson's communications which could accuse him of goading on the mob; but he looked to the end, to the result which had been produced. Dr. Johnson, he said,

appeared to be greatly annoyed by his remarks, he was afraid that conscience had something to do with it.

Dr. Webster thought it was of no use to prosecute the discussion. Every man had a right to express his opinions.

Dr. Ferguson did not wish to prolong the debate, but a serious charge had been made against the profession at Sunderland. Mr. Greenwood ought to explain on what grounds he had made such an accusation, which he was sorry had been made within the walls of that Society. Were he a practitioner of Sunderland he should know how to act.

Mr. Chinnock was of opinion that this question should be entered upon, as it involved two of the most active members of the Society. Dr. Johnson was charged with feeling conscientious of having acted wrongly. He thought that notice ought to be taken of it.

The President was of opinion that enough had been said on the subject.

Mr. King would not be satisfied without an apology.

The President then urged on the Society the propriety of considering the treatment of cholera.

Mr. Ogle narrated a case of decided cholera, which recovered by bleeding; the blood presented a buffy coat, which appearance is very unusual.

Mr. Foote, jun. said, that he was not aware whether he was in order in addressing the Society, as he did not intend to say any thing concerning the treatment of cholera, but merely to submit some remarks, which he had commenced on the last evening, when he was interrupted by the adjournment of the debate.--Mr. Greenwood, in his haste to support his favourite theory, and fanciful deductions, not only manifestly contradicted himself, but also the Central Board of Health, for which he is so great a stickler, (*laughter, hear, hear.*) An evening or two since, Mr. Greenwood stated that Mr. D'Egville, a surgeon of Sunderland, visited

several cholera cases, and, after returning home, his mother was taken ill and died; his clothes were sent to a washerwoman about two miles from the town, and laid on a bed. The husband of this woman was taken ill, and died; and on these cases Mr. G. relied very much to prove the contagious nature of cholera. But it must be remembered, that Mr. G. stated, in answer to a question put to him by Mr. F. on a preceding evening, that an autopsic examination did not take place, and it is probably in the memory of the Society, that Mr. G. objected to two cases brought forward by Dr. Johnson, because an examination after death did not take place, and observed, on that occasion, that unless the symptoms before death, and the appearances after, tally, the case is not cholera. Such being the case, it must be evident that the cases previously alluded to, are not cholera, and, consequently, are no proofs of its contagious properties. M. Magendie has stated that only one examination after death took place in Sunderland, and, consequently, according to Mr. Greenwood's shewing, there has been only one case of that disease in all Sunderland. (*Applause.*) The Central Board are daily issuing reports of the progress of cholera, containing so many remaining, so many new cases, and so many recovered; now, as these cannot have been examined after death, it must be evident that these are not cases of cholera.—Mr. Greenwood is constantly reiterating in this Society, the assertion that cholera was imported into Sunderland in spite of the dissent of the meetings; but hitherto he has not been enabled to adduce any proof of his assertion. Mr. G. rests, in a great measure, his belief in contagion, on the fact of its appearing first in sea-port towns; but if he will turn to Mr. Greenhow's work, he will find it recorded, that Mr. Green, a contagionist, met with a case, about a mile distant from Sunderland, ere it showed itself in that town. How will Mr. G. reconcile this with its appear-

ance at Paris in the centre of France, and with the declaration of the talented medical attendants of the Hotel-Dieu?

Mr. Chinnoek was desirous that the discussion on the treatment of the disease should be proceeded with.

Dr. Ferguson observed, that the gentleman on his left had risen once or twice on the preceding evening, and he believed that it was an understood thing, that he should, be allowed an early opportunity to address the Society this evening.

Mr. Greenwood thought himself very unlucky in being selected this evening by every one. He had read the cases in Mr. Ainsworth's excellent work, which he dared say that young gentleman had read, or, if not, he would advise him to read it. The case was that of Mr. Hemplenden, and not Mr. D'Egville, and he had merely selected it to show the peculiar laws of contagion, in regard to communication by clothes. He then paid a high compliment to the distinguished medical men in Paris, but regretted that they had come to so hasty a conclusion.

Mr. King observed, that Mr. Greenwood, instead of answering the questions so ably put by the gentleman on the other side, had indulged the Society with a long rigmarole about Mr. Ainsworth, and about the high characters of the physicians and surgeons at Paris; and then, after praising them highly, says, do not depend on them, they have come to a hasty conclusion. He urged him to explain the arrival of the disease in Paris.

Mr. Chinnoek made several remarks on the case of sporadic cholera, brought forward by Dr. Webster on the last evening, which he thought sufficient to prove the non-contagious nature of the disease. He had seen 28 cases occurring sporadically, and although occurring in dirty, filthy places, where there was every requisite for contagion, the disease had not spread. He earnestly entreated the members to bring forward cases of sporadic cholera.

Mr. Greenwood thought that the experience of one man was not sufficient, but that historical information should be obtained. We live in an age when no one will yield to the dicta of any man. He alluded to some cases which had occurred in Barrett's-court, where a man, seized with cholera, was being taken to the hospital, when the mob rescued him. The man who took him on his shoulders was taken ill and died. If the disease was owing to the atmosphere, why did it not occur elsewhere than in that particular house.

Dr. Granville rose to order. He had thought that Mr. Greenwood had risen to explain, instead of which he was entering on new matter. Mr. Greenwood was continuing, when

Dr. Johnson demanded that he should give an explanation of the questions which the gentleman had asked.

Mr. Greenwood. Rose of Berlin, who examined the blood of cholera patients, found exactly the same results as O'Shaughnessy at Sunderland, and this he thought proved, at least, chemical identity between the cholera of Berlin and Sunderland, and consequently of Jessore.

Mr. Chinnoek and Dr. Granville rose to order. (*Cries of order, chair, Mr. Greenwood, &c. &c.*)

Mr. Greenwood observed, that in ordinary diarrhoea, O'Shaughnessy had found that there was no chemical change in the blood; thus proving a distinction between diarrhoea and cholera. [There was great interruption during the whole of this speech.]

Mr. Simpson thought the question of contagion or non-contagion had been sufficiently discussed. A gentleman narrated a case of sporadic cholera, occurring in Little Park-street. No other cases had occurred in the neighbourhood.

Dr. Webster remarked, that Mr. Greenwood had alluded to a case occurring in Barrett's-court, of a man who touched the body of a cholera patient, was taken ill, and died. He

was desirous of knowing whether this man did not live in the same house as the other, as if so, being exposed to the same causes, the case would be materially altered.

Mr. Greenwood could not answer that question.

Dr. Webster added, that of 68 cases reported from Southwark, six were in the work-house, six houses had two cases each, and 49 houses had one each; and the disease had not spread in these houses, although every room contained a family. A case had occurred some time ago in the Borough, but the disease had not spread; another had occurred lately, but the patient had not had any communication with the previous case. He stated this on the authority of Mr. Hooper. He considered that statements from Russia were not to be depended on, as they could not be verified, and every one was aware how very difficult it is to get at facts, even next door to us. The certificate from the Hotel-Dieu was, in his opinion, a most important document.

Mr. Foote, jun. called on Mr. Greenwood to reply to his remarks, as he should consider, if he did not, that he could not.

Dr. Stewart observed that persons were constantly leaving town in all directions, and yet we do not hear of any cases within ten miles of London. He hoped that the only distinction hereafter would be between those who had exerted themselves and those who had not.

A French gentleman warmly defended the Parisian Board of Health against Mr. Greenwood's sweeping assertion; he declared that it had not come to a hasty conclusion, inasmuch as many of its members had witnessed the disease in England, Russia, and Poland.

Mr. Greenwood did not intend to cast the slightest imputation on the distinguished individuals of the continent. He had merely used the term *hasty conclusion*, from the difficulty there is of forming an opinion, as he knew by himself.

Dr. Granville considered Mr. Greenwood as the *Sir Charles Wetherell* of contagion; a chip of the old block, although made of GREEN-WOOD.—(Laughter). He believed that Mr. Ainsworth's cases would not bear sifting. He considered that those who formed and expressed opinions, without having seen the disease, were alone subject to be branded with having drawn hasty conclusions.

Mr. Greenwood alluded to the smack, *Trusty*, which had left the infected port of London and had lost several men on board. He considered that Dr. Douglas's report was conclusive.

Dr. Johnson observed, that he had mentioned the cases in St. Thomas's Hospital on a previous evening. They had occurred in different wards, totally unconnected. One of the first persons seized was a surgical patient, who had just undergone an operation.

Mr. Samwell narrated a case which went to prove the non-contagious nature of the disease.

Mr. Marshall (assistant on board the *Dover*), stated that they had had sixty cases. The surgeon was a contagionist, himself a non-contagionist; he had never been able to trace contagion in any instance. He thought it rather remarkable that every body had diarrhoea on board.

Mr. King asked whether it was not more likely that this diarrhoea was owing to the peculiar circumstances in which they were placed, being exposed to greater vicissitudes of weather than those on the land, than to contagion. When he had been too long in the dissecting-room, no matter what disease the subject had died of, he always got diarrhoea.

The discussion was continued a short time longer, after which the meeting adjourned.

Review.

The Cyclopædia of Practical Medicine.

Edited by DRS. FORBES, TWEEDIE, and CONOLLY. Parts II. III. and IV.—February, March, and April, 1832. Royal 8vo. pp. 128. London: Sherwood and Co.

“Fiat justitia, ruat cælum.”

THE epidemic cholera having just taken leave of the alarmists, and its terrors having vanished into thin air, to the entire satisfaction of the non-contagionists, it has ceased to absorb and engross the whole attention of the profession, and left us an opportunity of once more devoting our pages to reviews and notices of recent works, or to the legitimate purposes of journalism.

The intense interest the disease excited in the minds of the faculty, excluded the consideration of ordinary topics, and caused a great arrear in our review department. We resume, with pleasure, our critical duties, and we inform authors in general, that all works forwarded to us will be noticed impartially, as early as our engagements will allow. We think it right to give a profession of our critical code on this occasion, and to apprise our friends that it will always guide us, and be as inflexible as the laws of the Medes and Persians. Every writer shall have justice at our hands; the merits and demerits of his performance shall be fairly and impartially noticed. Neither authors nor publishers shall ever influence our decisions, nor shall the dicta of our worthy contemporaries be precedents for us. Such is our firm determination; and we appeal to our past conduct in proof of its sincerity. We are well aware that it is contrary to worldly wisdom, and to personal interest, but it strictly accords with the real principles of criticism, and cannot fail to please the profession in general. A reviewer who discharges his duty, in strict conformity to our ideas, is a true friend to science; and

though his conclusions may prove unpalatable to those interested in the success of the work which he examines, nevertheless, they may prove conducive to the promotion of the interests of medical science, and of humanity. We are led to make these observations, as we have reason to know that some authors, whose productions we have already examined, were grieved at our criticism; and among these were some of the editors and collaborators of the work whose title is now before us.

In our review of Part I. of this work we were compelled by truth and impartiality to expose its serious defects, which we sincerely wished to see removed from the succeeding pages. It was with great reluctance, and with much pain to our feelings, that we censured many articles in a work that was a national undertaking, because, as we then declared, our anxious wishes were to advance and encourage its utility; and because the avowed editor, of this Journal was under personal, though professional, obligations to one of the conductors of the work in question. But upon that, as upon all occasions, our coadjutor and ourselves preferred, and ever will prefer, public to private interest. We had an impartial duty to perform to the whole profession, and though grieved to condemn, we must be just. Despising that fulsome adulation and disgraceful flattery, those ill-deserved compliments and mean compliances which distinguish the temporising policy of some medical reviewers; we boldly and fearlessly exposed the numerous defects of arrangement, style, composition, commission, and omission, which characterized the first part of this work. We imputed blame and praise to the authors with candour and equity: we defended our strictures by argument, we justified them by usage, and we established them by irrefutable proofs. We asserted the truth, and maintained it by facts. We impugned false notions by argument, and attacked them with ridicule.

Influenced solely by rigid justice, we censured faults, we animadverted on improprieties, and we criticised impartially. We praised every thing that was meritorious, while we corrected faults, and rectified errors and mistakes.

This is true criticism ; to praise and censure, and give a satisfactory reason why you consider the passage good or bad. We almost agree with an able modern writer, that "there is no criticism in this country—considering that word as the name of a science." A book comes out ; "it is capital," says one ; "it is detestable," says another. How true, how just is this position, with regard to medical critics. "Between party spirit, party puffing, and party sneering," a luckless metropolitan medical writer has little chance of fair and impartial criticism. If he belongs to the medical reformers, he is abused by their opponents without mercy ; and *vice versa*. If praised by the one, there will not be a redeeming feature found in his work by the other ; and if he is independent of either, he will be abused by both. "The good critic," says the able writer in the *New Monthly Magazine* for April, whom we have already quoted, "that rare ideal, must have in him courage to blame boldly, magnanimity to eschew envy, benevolence to search for obscure merit. He must have genius to appreciate, and learning to compare : he must have an eye for beauty, an ear for music, a heart for feeling, a mind for reason." He must be free from favour, affection, and partiality ; he must "give unto Cæsar the things that are Cæsar's ;" he must praise or censure according to his conscientious conviction, and he must make up his mind, that it is impossible to please all parties, authors, editors, publishers, and purchasers. The *mens conscia recti* must be his motto ; and if his motives be pure, honest, and just, his judgment will be approved of by the majority of his readers, in an age so liberal as the present. In discharging his duty, he

must, of necessity, incur the displeasure of some authors, who will apply to him such epithets—as surly, sour, censorious, acrimonious, harsh, abusive, and unjust critic ; but he will receive the applause of all the enlightened and independent.

Actuated by the principles of true criticism, which we have now placed before our readers, we felt bound to analyse the work under notice, and to censure much of its contents. In doing so we gave great offence to some of the editors and contributors, while many of the latter, whom we could name, unhesitatingly declared that our criticism was just, and not more severe than the circumstances called for. We were followed by our contemporaries, who, loth to condemn, were still obliged to admit the validity of our decision, and to reiterate our suggestions for improvement. We have now the high gratification to avow, that our well-meant strictures have produced the effects we desired ; every hint we gave has been duly appreciated ; every fault we exposed has been corrected ; every suggested improvement made ; and that attention to the style, composition, erudition, and research, which we contended for, evinced in the parts now before us, so as to render these infinitely superior to their predecessor. We therefore feel great pleasure in being enabled to make this declaration ; and are proud that the work is so improved by the adoption of our suggestions, as now to possess high claims, as a national production. Every student and practitioner should possess this work, as a record of the opinions of a large number of physicians of eminence in his native country. It will be considered a work of reference and standard authority, and a monument of learning, industry, and talent, whose utility is at present unequalled in the annals of our literature : nevertheless, it is by no means as voluminous and comprehensive as it ought to be, as will appear by the succeeding facts.

It is really surprising that a work

of this kind was not hitherto attempted in this country; and more especially as we had no less than four examples set us by our Gallic contemporaries, and these well worthy of imitation. Our readers are aware that within a few years, no less than four Dictionaries of Medicine have appeared in France, one in 60, one in 20, and two in 15 volumes large octavo. The contributors to these are the most distinguished physicians and surgeons, indeed, those most extensively engaged as professors, and also in private practice. It is difficult to explain why it is, that the most eminent of the profession in this country are the smallest contributors to science. It has been said that our countrymen are so extensively and incessantly engaged in practice, that they cannot find time to write; but this reason is unsatisfactory, as the Gallican faculty are precisely in the same condition. Whether the love of posthumous fame, so characteristic of our foreign contemporaries, affords a better explanation, we leave our readers to determine. There is one leading feature in the *Cyclopædiæ* and other French works, which is highly deserving of imitation; namely, the combination of the most extensive research with originality and personal experience. In all the articles in the French Medical Dictionaries this most important combination is apparent; and hence, on referring to an essay upon any subject, we have a complete treatise before us. We are happy to observe a like feature in the last fasciculus of the *Cyclopædia of Practical Medicine*; and we sincerely hope that it will distinguish all the succeeding parts of the work.

It would be impossible for us within the limits by which we, as weekly journalists, are necessarily circumscribed, to give a satisfactory analysis of a work so comprehensive as that before us; but there is little necessity, as the original will be in the possession of every aspirant student and zealous practitioner.

Part II. commences with a conti-

nuation of aneurism of the aorta, by Dr. Hope; and is ably executed by him, whose great work on Diseases of the Heart and large vessels elicited our warmest approbation, and is now universally recommended by our contemporaries. Dr. Robertson follows him on aphonia and aphtha, and treats both too slightly. Dr. Clutterbuck comes next in order, as the author of an able and instructive essay on cerebral apoplexy; while Dr. Townsend, of Dublin, one of the best stethoscopists in these countries, the translator of Andral's Pathology, and author of a graphic chart of the Physical Diseases of the Lungs, is the essayist on pulmonary apoplexy. The article, Arteritis, is from the pen of Dr. Hope, and is treated with his usual ability. The articles, artisans, diseases of, and ascites, are the productions of Dr. Darwall, and are well written and instructive. Asphyxia, by Dr. Roget, is remarkable for elegance of style, correct composition, and accurate scientific views. Asthma, by Dr. Forbes, is executed with that ability and judgment so eminently characteristic of the translator of Laennec, and of one profoundly acquainted with diseases of the chest. Astringents are described by Professor Thomson, of the London University, with that comprehensive accuracy characteristic of his writings on *Materia Medica*. Atrophy, by Dr. Townsend, is by no means so minutely discussed as it might be; and the last article, Auscultation, by Dr. Forbes, is treated at great length, and with the usual ability of the author.

Part III.—In this fasciculus we find the article auscultation continued by Dr. Forbes, who has described this inestimable diagnostic with great fidelity. Dr. Scott describes that species of paralysis peculiar to India, called Barbers, and also Beriberi, another malady of the same country. Dr. Forbes is the author of the essay on bathing, in which we find a full account of the efficacy of the various baths. Blood, morbid states of, and

blood-letting, are described by Dr. Marshall Hall, with the force and accuracy which distinguish all his writings. These articles are highly valuable and instructive. Brain, Inflammation of, is the joint production of Drs. Quain and Adair Crawford. This formidable disease is most graphically described, and reflects much credit on the reputation of the authors. Dr. Williams, who has written one of the best treatises on Auscultation, is the author of the essay on bronchitis, which he has executed with his usual skill. Bronchocele is well described by Dr. Andrew Crawford, while Bullæ has ample justice done to it by Dr. Todd. The last article is Calculus, by Dr. Thomson, of Glasgow, and is a masterpiece. It evinces great research.

Part IV., for the present month, contains several articles of interest, and these display much more research than any in the former numbers.

Dr. Thomas Thomson concludes the chemical analysis of Calculus, while Dr. Cumin's description of Calculous diseases, is an essay of considerable merit. Dr. Joy is the writer of the article Catalepsy; Dr. Williams, of Catarrh; Dr. A. T. Thomson, of Cathartics; Dr. Forbes, of Chest, exploration of; Dr. Gregory, of Chicken-pox; Dr. M. Hall, of Chlorosis, Dr. Brown, of Chorlea; Dr. Andrew Crawford, of Chorea; Dr. Clark, of Climate; Dr. Whiting, of Cold; Dr. W. and Dr. Tweedie, of Colic; Dr. W., of Colica Pictonum; Dr. Adair Crawford, of Chorea; Dr. Apjohn, of Combustion, Spontaneous human; Dr. Barlow, of Congestion of Blood; Dr. Brown, of Contagion; and Dr. Tweedie, of Convalescence.

We are happy to be enabled to pronounce a favourable opinion on the execution of the majority of these articles; and also to be enabled to declare that this part is far superior to all those that preceded it. Press of matter will not permit us to make extracts from the work at present, but we shall do so as early as possible.

The proprietors and editors of this work have great reason to thank us for our former criticism, which, though severe, was just, and to which they owe the success of the work; for we assure them that the whole profession was of our opinion, that if the improvements we suggested were not made, the production could not possibly succeed.

ON SULPHATE OF QUININE,

AS USED IN COMBINATION WITH PURGATIVE MEDICINES, WITH A NOTICE OF ITS ACTION ON THE LIVER.

An Extract from a Lecture by JOHN EPPS, M.D., at the Westminster Dispensary.

IN speaking, gentlemen, of quinine, there is one application of this valuable remedy particularly worthy of your attention; it is the benefit arising from the combination of this medicine with *purgative* medicines. I was led several years since, as those gentlemen know who have attended my lectures, to recommend the use of quinine, in combination with purgatives, on the ground, that I believed that *constipation*, in many cases, is dependent upon want of *tone* in the *muscular fibre* of the intestinal canal. Sulphate of quinine, acting so beneficially as a tonic, appeared to my mind as a most effectual adjunct to cathartics. This idea pleased me much; because I had ascertained, by continual experience, that the bowels, when called into action by the use of purgatives, passed into a state, in which an *increase* of dose is continually necessary to produce the effect desired. This, in itself a great evil, seemed likely to be obviated by the use of quinine, which, as a *tonic* giving tone to the bowels, might, it was presumed, give such a power to the intestines as to enable the *fecal* matter itself (by the *aid of a little* medicine) to produce the appropriate stimulus necessary to call them into action. This presumption I found verified by observation, and I was continually in the habit of prescribing

sulphate of quinine in combination with purgative medicines, and with the best results.

Conceive my pleasure then, gentlemen, when I found that in a paper, read before the College of Physicians, written by Mr. Chevalier, the same use of the sulphate of quinine was held out to medical men. This confirmed me in the use of the remedy, and I daily prescribe the same. The use is now general, too general I fear, for it seems to be the lot of most to neglect the proverbial expression,

“In medio tutissimus ibis.”

No sooner was the use of quinine made known, than some practitioners promulgated the opinion, that quinine could be used in almost any affection, when given in combination with purgative medicine. Now, gentlemen, I maintain that such a conclusion is not justified by the facts. I myself have known many cases where quinine, given in combination with purgative medicines, has been attended with injurious results: such cases are those of persons who have a tendency to *hepatic* affections. I know many ladies who are troubled with hepatic affections, and who are of a constipated habit. These ladies, if taking quinine along with hepatic medicines, always suffer from *severe pain in the region in the liver*. Now, gentlemen, I would recommend you to bear this fact in mind, for I am sure you will find it important; and be not led away by those who talk of giving quinine even when inflammation of the liver exists. I do not say that quinine then does not afford *temporary* relief in some cases, but the disease is speedily increased.

In concluding I may remark, that no question can exist in regard to the fact, that the *combination of quinine with purgative medicines* enables the practitioner to *diminish the dose of the latter*. This fact, I repeat, is well worthy of remembrance.

March 14th, 1832.

ON THE
NOSOLOGY AND DIAGNOSIS OF
SPASMODIC CHOLERA;
OR
DIARRHŒA CEPHALICA.

By S. HOOD, A.B. M.D.

SPASMODIC cholera is an affair of time as well as of knowledge; the error of to-day cannot be rectified to-morrow, every measure and minute involves the life of a fellow creature; every thing, therefore, which tends to remove doubt and perplexity from the understanding has its proportionate value. Curtis, who invented this unscientific name, excused himself for doing so by stating, that he found no name for it in nosology; whereas it was his own laziness which prevented him from finding it, because it was classified by Cullen, and, what is more, classified right, being considered by him as a species of diarrhœa. Cullen, with great good sense, restricted cholera to a purging and vomiting of bile; and, indeed, if the term receive a more extended meaning, most diseases may, in the course of treatment, be converted into cholera, and the greater part of nosology be thus swallowed up in one word to the utter confusion of facts. Many compound Greek words have a more extended meaning than the words from which they are derived; cholera is one of those, and signifies not merely a bile-flux, but a flux of bile both upwards and downwards, and the extension of its signification to every vomiting and purging leads to endless error. Mr. Kennedy, in his valuable work, has striven hard, with great learning and ingenuity, to prove that cholera does not signify a biliary flux at all, but a running spout. Without disputing his philology, his argument is not the least strengthened, because it is not the spout itself, but what is running from it, that is the subject matter here; whether the spout be running mellow hermitage, or rapid swipes, is the point at issue.

Now in the cholera of Sydenham and Cullen the bile will not be spared ; but in the spasmodic cholera the heart's blood itself is escaping, and is not this alone a sufficient nosological difference, independently of numerous other symptoms as strongly marked ? But even granting that every vomiting and purging constitute a cholera, why call this disease cholera spasmodica, when the substantive cholera by itself implies spasm without any adjective attached to it, like a rider to a bungled act of parliament. If the well-educated part of the profession continue to tolerate such tautology, there is a likelihood of seeing, by-and-bye, works on spasmodic tetanus, inflammatory pneumonia, and Asiatic fractures of bones. Cholera asphyxia is a still more absurd term than cholera spasmodica, because it not only implies a biliary flux, which does not exist, but suffocation from external causes, whereas the patient is choked for want of expansion of the heart and arteries.

Since I began to write this article, I have seen the advertisement of a work on diarrhœa serosa ; this is something ; it brings us safe back to Cullen's nosology, and is one step in the right path. But serosa is a mere epithet ; every diarrhœa is more or less serous ; it is a specification of the disease which is required. This epidemic being a disease which begins and ends in the brain, and the first symptom, purging, being merely a pathognomic sympathy of the abdominal viscera with the brain, (which itself, towards the close of the cold stage, becomes compressed by the fulness of the veins or effused serum), diarrhœa cephalica is a name which would both admonish the practitioner of the incipient danger of the first symptom, and guard him against the last consequences, apoplexy and water in the head. By putting the beginning and the end of the disease thus together, the physician has a fair field before his eyes ; he thus knows, right well, what is coming, and, if he delays to act, let him not plead ignorance as an

excuse. Let no one take this statement on my word, but go to the cholera hospitals and count the number of patients emerging from the cold stage with the apoplexia hydrocephalica of Cullen, and judge for himself. If the symptoms, during life, are not sufficient to produce conviction, open the heads of the dead, for morbid anatomy is of no use in spasmodic cholera unless the brain be also dissected. Besides the above reasons for specifying the epidemic, a change of name is necessary in another point of view, because there will be much risk of many treating the autumnal cholera with the strong stimulants requisite in the treatment of the spasmodic cholera. I have merely given my [opinions on this subject, well knowing that I am too humble and obscure an individual for them to have much influence on the profession beyond my private friends—for myself I should have preferred an Indian name unclassified.

The collapse of cholera is a word now much in use, which has puzzled me not a little ; it may be easily understood as regards the *coup de soleil* variety of the disease, such as the case of the Hydrabad tailor, who died with his needle in the stitch, or Mr. Gordon, who dropped down while bleeding a patient ; but having failed to comprehend how collapse is applicable to spasmodic cholera in this country, a short analysis of the word here will not be out of place. Collapse was, I believe, a term first introduced into medical phraseology by Cullen, who used it to express his second class of causes producing epilepsy by weakening the energy of the brain. "Physicians," he says, "have hitherto taken little notice of certain causes which manifestly weaken the energy of the brain, and act by collapse. These, however, have the effect of exciting the action of the brain in such a manner as to occasion epilepsy ;" which is equivalent to say, that weakening the energy of the brain, increases its action. But he proceeds to state "there are

certain powers of collapse which, in effect, prove stimulants. That there are such powers, which may be termed indirect stimulants, I conclude from hence, that several of the causes of epilepsy are such, as to produce syncope. The first to be mentioned of this kind, is hemorrhagy, whether spontaneous or artificial. That the same hemorrhagy which produces syncope often, at the same time, produces epilepsy, is well known." Thus, according to Cullen, hemorrhage and syncope are indirect stimulants, because the muscles are thrown into convulsive contraction; but such a misapplication of facts and reasoning is scarcely any where to be found, always excepting John Hunter's "stimulus of death." Hunter and Cullen were both misled by the *vis insita* attributed to the muscles, and, if they were both alive now, their own doctrines would compel them to pronounce the cold stage of cholera spasmodica a state of excitement or abjure their medical creed. I was a sturdy believer in these doctrines, when I first saw spasmodic cholera, and found myself forced, either to abandon my medical faith, or relinquish the subject as inscrutable; and, I must say, I have had little reason to congratulate myself in the pursuit of physiological truth—but this is a digression. In his very able chapter on epilepsy, Cullen takes a slight fling at Stahl's doctrine of an administering soul. Now I maintain that this is more an entity than the *vis insita* of the muscles: it might as well be argued, that the motive force of a steamer is the *vis insita* of her paddles. Stahl, indeed, was pursuing a shadow, the substance of which Galvani produced. If collapse has any meaning, it is a suspension of the intellectual faculties, a reduction of expansive animal galvanism.

Diagnosis.—In the East I am not aware of any method of discriminating the first stage of spasmodic cholera from laxity of the bowels only; if the patient has been within the limits of the epidemic, the slighter it is, the

more it is to be dreaded. Some authors mention deafness, giddiness, head-ache, and debility, as symptoms of this stage, and when they are present they render the purging still more suspicious. I have not seen these symptoms myself, for it is no easy matter to catch a soldier in the first stage of spasmodic cholera. There is little risk in confounding the cold stage of spasmodic cholera with any other disease; the previous purging, or accompanying diarrhoea, distinguishes it from the cold stage of an ague; and if the spasms be strong enough to resemble tetanus it is of no consequence, as both diseases are only to be cured by artificial re-action. I have never seen the slightest similarity between cholera morbus, properly so called, and the spasmodic cholera, except the spasms of the stomach, abdominal muscles, and the legs. Though a landsman, I have crossed the equator six times, in visiting the four quarters of the globe, and consequently have had an opportunity of seeing not a few cases of cholera morbus, besides having it violently myself after much fatigue and many sleepless nights, while the epidemic was prevalent; but never, in my life, have I seen it attended by a loss of animal heat or collapse, in Cullen's sense of the word. I do not mean to deny that both these symptoms do not sometimes occur; but I am quite positive that they occur so seldom, and then only towards the close of the disease, that any attempt to mix them up with spasmodic cholera can deceive none, but the merest tyros in the profession; or, in other words, only the last symptoms of cholera morbus can be confounded with the beginning of the cold stage of the epidemic. The two first stages of spasmodic cholera render the apoplectic or third one manifest to the most obtuse understanding; nor indeed is a diagnosis, or any thing else, of the least consequence when hydrocephalus has begun. It is impossible to say at what period of the cold stage absorption ceases and effusion begins in the

brain, but most likely early ; as distention of the cerebral veins and effused serum produce the same somnolency, there seems no means of deciding when effusion has commenced by external symptoms.

After seeing the epidemic now in the metropolis, I find little to alter in my last paper on the pathology of the spasmodic cholera of India. The disease is unequivocally the same in all its phasis as that which attacked his Majesty's forces on the Madras station, in 1818, making due allowances for what some botanists call climatization. There are the three distinct stages, but all of them more protracted, especially the two last ; the pain and spasms are much slighter, and the lividity of a deeper hue, with a more general swelling of the veins than I ever before beheld. In one case which I saw, I am convinced ten ounces of blood might have been extracted without a ligature, by performing venesection in the axilla. The only symptom wanting was the instinctive craving for acids, so urgent in the East. It requires a keen eye, on dissection of the brain, to detect the apoplætic stage in India ; but here it is the most prominent feature of the disease, and lasts several days : from the cessation of pain, the patients often say they are recovering till they can no longer articulate. The third stage of the disease is nothing more or less, in all the cases which I saw, than the apoplexia hydrocephalica of Cullen. Through the kindness and influence of Messrs. Hooper and Evans, of Southwark, I procured one dissection of the brain, which would have been more interesting if I had seen the subject of it during the disease. Still, however, the autopsy was very conclusive, and verified all the symptoms which I had seen in other cases. There was the same effusion of serum between the pia mater and the tunica arachnoidea, as in the East Indies ; but there was, moreover, abundant effusion of serum in the base of the cranium and ventricles of

the brain. The serum was only acid. I was very anxious to examine whether the bile was of the same thick, tarry nature, as in the East Indies, but neither entreaty nor money could prevail on his children to permit the abdomen to be opened. I may just mention, that Mr. Walker wounded himself in three places during the dissection, and was thus fairly inoculated for water in the head.

The case above alluded to belonged to Mr. Evans, who has most obligingly allowed Mr. Walker to furnish me with an account of the dissection, to both of whom I offer my best thanks for their permission to publish it as theirs.

"Thomas Pratt, a labourer, residing in No. 4, Wallace-court, Mint, was attacked with cholera, March 26th, and died March 27th. Examination of the head (which alone was permitted to be opened) was made 15 hours after death. The veins and sinuses of the dura mater gorged with black fluid blood. Arachnoid opaque in several places near the superior longitudinal sinus, where it crosses from one convolution to another. Considerable effusion of transparent serum underneath the anachnoid, so as to raise and distend it. The large veins of the pia mater were seen traversing that membrane, and filled with dark blood ; the smaller vessels injected with vermillion red blood. Ventricles full of serum—plexus choroïdes gorged with blood of a dark livid colour. The arteries at the base of the brain filled with dark blood—considerable effusion of transparent serum at the base of the brain and theca vertebralis. The amount of effusion in head and spinal canal not less than two ounces." When, I wonder, will spasmodic cholera become a matter-of-fact subject. I find it industriously whispered, that when a patient is salivated he is safe, I would caution the readers of this Journal against this dangerous belief, because the cholera does attack persons under salivation. The shortest case of it that ever came within my

notice lasted four hours, and the patient was salivated for lues at the time of attack.

Though I admit the identity of the epidemic in the metropolis with the cholera spasmodica of India, I entirely concur with Drs. Johnson and Ryan, that the disease was not imported. The manner in which it bisected Germany, taking a western course, was so strong an indication of what part of our coast it would strike first, that the day after the newspapers announced its presence at Hamburg, I saw Dr. Anderson refer to his terrestrial globe, and put his finger on Sunderland and Newcastle.* There is little doubt that, even in this country, sporadic cases of spasmodic cholera do sometimes occur spontaneously, and by artificial means. In 1827, a village Galen, probably rising from the perusal of Hamilton on purgatives, administered a strong cathartic to an ague patient, which was in full operation at the accession of the cold fit, and the man died suddenly, with all the visible symptoms of spasmodic cholera. But the matter did not rest here, for the coroner took up the case, and ordered a minute dissection of the body; and notwithstanding effusions were pointed out to the jury, both in the spine and cranium, like straight-forward Englishmen, they returned their verdict—died of physic. This is a most important case, which shews that a few drops of croton oil, or any other drastic purgative, may (if prescribed at a wrong time) convert any ague in the country into spasmodic cholera.

STATE OF THE PUBLIC HEALTH IN
LONDON.

At the Westminster Medical Society on Saturday week, Dr. Webster relat-

* Cholera had appeared within a mile of Sunderland before a single case occurred in the town. This is admitted by Mr. Green, a contagionist, on whose authority it is quoted by Mr. Greenhow. (See our review of Greenhow on cholera, No. 9, p. 286.—Eds.)

ed a circumstance of some importance at the present moment, as it shews the state of public health is, in a general point of view, nearly the same now as in former years, notwithstanding the actual presence of a severe epidemic. He mentioned at the dispensary, of which Dr. W. is one of the physicians, 195 medical patients were treated, from the 13th of February to the 1st of April, 1825; during the same period of 1829 the number was 203; in 1830 it was 198; whilst in 1832 the total of medical cases, during the same period, had fallen to 123, being an actual diminution of more than one-third, although the cholera be prevalent. These facts, in addition to those mentioned on former occasions regarding the average number of deaths within the bills of mortality not being increased, cannot but be considered as satisfactory; and if similar returns were procured from all the public medical institutions of the metropolis much valuable information would be obtained, and it would then be easy to arrive at correct conclusions as to the health of the inhabitants of London—a point now involved in mystification.

Dr. Holland and the other medical officers of the Islington Dispensary, have published a report of the health of their patients, which clearly shews that diarrhoea has greatly decreased during the last month. We are perfectly satisfied that a similar report could be made from every hospital and dispensary in London. The Cholera Hospital, near Bethlem, did not have a single patient last week.

Dr. Stroud, of the Northern Dispensary, makes a similar declaration, while Dr. Pinckard, jun. and Mr. Walker, of the Bloomsbury Dispensary, who are also the medical officers of the Cholera Hospital in St. Giles's parish, state that the prevailing epidemic is confined to St. Giles's, in the vicinity of the dispensary.

London Medical & Surgical Journal.

April 14th.

VALID REASONS FOR THE CONTAGIOUSNESS OF CHOLERA IN GREAT BRITAIN.

IN a Parliamentary document just published, we find the *monthly* amount of the expenses of the Central Board of Health, to be as follows:—Lieutenant Marshall, has £33. a month; Sir W. Russell, M.D. £60.; Sir D. Barry, £42.; Messrs. Macdonald, £33.; and W. Maclean, £20.; two clerks, a messenger, and a porter to the Board, £28.; four deputy inspectors of hospitals, £89. per month; four staff and regimental surgeons, £87.; two assistant surgeons, £36.; three naval surgeons, £63.; one assistant surgeon in charge of a district, £18.; three assistant surgeons, £41.; deputy inspector of hospitals at Glasgow, £31.; two assistant surgeons there, £27.; assistant surgeon at Newcastle, £13.; assistant surgeon at Hetton, £27.; total monthly, £644.

This document offers ample evidence of the real motives which have influenced the Central Board of Health. After its perusal, no one can mistake the reason which led to the promulgation of the terrific proclamations on the contagiousness of cholera. The public press accused the Board of being influenced by interested motives, but both our hebdomadal contemporaries denied, in the strongest terms, that the members of the Board had received more than

their pay as military and naval medical officers. So much for the veracity of our contemporaries: But we do not wonder at this perversion of truth, when we consider, that the sub-editor, and author of all the papers on cholera, which have appeared in one of the above impartial periodicals, is editor of the Cholera Gazette, one of the official cholera inspectors, and consequently a staunch defender and a long-tongued trumpeter of the Central Board of Health. As to the other defenders of the Board they are too contemptible to excite our notice. During the last week the epidemic, called cholera, has so much diminished that the services of the focus of mischief at Whitehall are, in a great measure, dispensed with, and most of the members of the Board are allowed to return to their unknown habitations, there to enjoy the fruits of their unhallowed labours. They have set an example, which will be carefully avoided by the faculty, whenever it pleases Providence that another epidemic should visit this country.

THE ASSOCIATION FOR THE INVESTIGATION OF CHOLERA.

IN a late number we inserted the address of this meritorious association, which breathes a spirit of philanthropy, and love of science and truth; which every member of the profession, whose mind is unprejudiced, must admire. This body belongs to no party; it consists of physicians and surgeons of high reputation, and

of great practical experience; gentlemen who are well known to the profession, and not of yesterday's growth. Among these are Dr. Uwins, Dr. Johnson, Dr. Granville, Dr. Gilkrest, Dr. Sigmond, Dr. Leonard Stewart, Dr. King, Dr. Dill, Dr. Epps, Dr. Williams, Dr. Ryan, Dr. Chowne, Dr. Negri, Dr. Morris, &c.; Mr. Jones, Mr. Taunton, Mr. Proctor, &c. &c. Every one of these gentlemen is in active practice, many of them in extensive practice, several of them great contributors to science: and yet a contemporary, with that modesty which characterises it, declares, that "they are unknown, are men whose reputations are to be created, men on whom the public have little reliance, and the profession less—men whose renown is of that quality which is created by an ephemeral puff, or a paragraph in a morning paper, whose purpose having been served, they must be satisfied to be filed with the *boobies* of the day; forgotten by the powers to which they have offered sacrifice, and deprived of all influence upon other and equally enviable occasions of notoriety. * * *

"How different must have been our opinions," quoth our erroneous contemporary, "how opposite our pressions, had we seen upon the list of names those of Drs. Prout and O'Shaughnessy, certainly the best organic chemists in this city."

This is certainly one of the finest specimens of impudence and mendacity which we have ever seen, even in the pages of our worthy contem-

porary. It is probably written by some unknown subaltern of that periodical,—by one who has not received five pounds in the shape of professional remuneration during his life. But, gentle reader, only think of the association of the names of Prout and O'Shaughnessy! We should like to know what the latter has done since his graduation, in 1829, to this hour, save collecting, translating, and plagiarizing the writings of the continental chemists, repeating their experiments, and imitating them as closely as mortal man could do. We give him credit as a practical chemist and translator, but to compare him to Dr. Prout is the most consummate folly; and to place one or both of these chemical physicians over the majority of physicians and surgeons who form the association under notice, is one of the most preposterous absurdities that can be imagined. It may gullify the ignorant readers of our contemporary, but it must disgust every medical practitioner, resident in London, who knows all the parties. As farther proof of the veracity of our contemporary, we must state, that in its report of the proceedings of the Westminster Medical Society, March 10th, it avers, that "the anti-cholerists are fast disappearing;" but, reader, turn to our report in No 7, p. 215, of this Journal, and you will find, that on the contrary, the anti-cholerists are not only increasing, but almost universal; and at the last meeting, of Saturday, of the same society, there was but ONE solitary contagionist in the nu-

merous assembly then present. In fact, the very formation of the association which we defend gives the lie direct to the assertion. Had not the contagionists outraged truth, decency, and common honesty, in almost all their arguments and positions, we should have passed them by in silent and utter contempt. They have proved themselves, one and all, the creatures of circumstances—we dare not individualize. We inform this “body of garblers,” that the association for the investigation of the pathology and treatment of cholera, will so expose their crooked and unprincipled policy, as to hand their names down to posterity as a set of unscientific and temporising men, whose sole object was personal aggrandisement, and neither the promotion of the interests of medical science nor of humanity. How very different have the profession in France acted, as stated in our last, and this was to be expected from the constitution of the faculty in that country, where men of transcendent talents only can fill public situations, such as the Dupuytren, Magendie, Recamier, &c. Men who do not seek a bubble reputation. Thanks to the great Napoleon for the annihilation of all monopoly and corruption in the medical profession in France, and for that true wisdom which led him to decree that genius and merit should be rewarded. He it was who thought that honour was due to personal virtue and high attainments, and not to party or intrigue, or monopoly, nepotism, avuncularism, or

the interests of the few; he therefore wisely thought that no man should wear an undeserved dignity, and that honour should be purchased by merit only. The happy results of his conclusions are—a clear stage and no favour, in medical appointments; and every man wears the palm who merits it. Hence, all the medical appointments in France are filled by men of ability and distinction, after the most scrutinizing examination in public; and hence the utter impossibility of such individuals committing such grievous errors as distinguish their neighbours. They will never build unsure and ephemeral reputation, by terrifying the public without just cause; or sit in grim and assumed majesty, diffusing pestiferous proclamations “to fright the world.”

CHOLERA IN PARIS.

WE are enabled, through our exclusive resources, to communicate to our readers the latest intelligence on the progress of cholera in Paris. We are sorry to state, it is much more fatal there than it has been here, though every possible attention is bestowed by the first physicians and surgeons on the afflicted. The faculty are as much divided as our own on the treatment, and the methods of combatting the disease are as widely different as possible. We must first observe, that the French government had sent several eminent physicians to Poland, Russia, and England, to investigate the pathology of

the disease, and the result has been, that many of the profession in Paris, consider it of Asiatic origin. M. Dupuytren was first of this opinion, and having received sixty-four patients into the Hotel-Dieu, he ordered them the subacetate of lead, and next morning he found thirty dead. We need scarcely state, that he speedily abandoned this plan, and his notion of Asiatic cholera. Another correspondent informs us, that he was a witness to the cold effusion in a case with collapse, by the advice of M. Recamier in the same hospital, which caused the immediate death of the sufferer. It is to be supposed that a great proportion of the populace of France are subject to bowel complaint at all times, in consequence of the meagre diet and sour wines which they are used to generally, and therefore cholera will be more fatal to them than to the people of this country.

Since writing the above, we have been favoured with the perusal of a letter, written by a distinguished German physician, from which we make the following extract:—

“ I sit down to communicate to you some details about the *cholera*. No picture that you can have read of its effects here is exaggerated; the reality exceeds every description. The cases increase every day, and so does the number of deaths. Several remedies were tried at the Hotel-Dieu. Dupuytren gave the subacetate of lead, Magendie gives punch—they now begin to bleed. Recamier applies cold water; Bailly tried the galvanic pile, in one case, with success: and that diversity of treatment is in perfect accordance with the mortality prevailing among the pa-

tients. I find there is a general want of perseverance in continuing rubbing, which is to be considered the principal means to restore the activity of the skin, and the circulation of the blood. You may frequently see one man rubbing a patient with a small piece of flannel for a short time, and go away without having done any thing else than literally performed his duty. Every patient ought to be attended by two persons, at least, but that is almost impossible in an hospital, and therefore the results must be unsatisfactory.”

These facts fully prove that our diversity of opinions are not peculiar. There are no contagionists in Paris, and hence there is no impediment to the exertion of every humane effort for the alleviation of the horrible sufferings of the diseased.

The King and his Ministers contributed munificently towards the removal of the wants of the poor; and the Duke of Orleans handled the patients in the Hotel-Dieu, when covered with perspiration, to prove that he had no fear of contagion. He also gave a large donation for the benefit of the patients.

DEFECTS IN THE MEDICAL SCHOOL AT ST. BARTHOLOMEW'S HOSPITAL.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

It is, perhaps, hardly fair that I should again, at so short an interval, knock at the door of your *editorial* study, and thus disturb you by rousing your sleeping Cerberus to growl and bark, who refused me admission the last time (the surly rascal!) on grounds of justice, which, it will be recollected, I anticipated. Notwithstanding,

however, these objections to the measure, I will once more venture an attempt of trespass upon your literary manor; and your compliance will not only conciliate my own, but (without assuming to myself the attribute of omniscience) I will venture to say, the gratitude of my fellow students.

The object of my present letter is to call the attention of the governors of St. Bartholomew's Hospital to a duty which they have omitted to perform towards the students attending the lectures of that institution; and it is truly lamentable to survey the sacrifice of valuable time consequent upon this omission. Every alternate morning Dr. Hue's lectures, according to the subject which he handles, terminate at eleven o'clock—at a quarter to one o'clock the surgeons arrive to perform their daily routine of "going round," as it is called. Now, then, allow me to ask, gentlemen, how the students are to employ their time during this interval? The reply to this question obviously would be, knowing the present deficiency of resource at St. Bartholomew's Hospital, let them go home and read. But, alas! it unfortunately happens, that the locality of this institution is very unfavourable for students' lodgings, so that they are obliged to seek their abode at such distances that the walk home would be as great, if not a greater, sacrifice of time to them, than standing, as they now do, about the doors and square of the hospital.

Laying aside, however, the ineligibility of the locality of this hospital for lodgings, it is my opinion, and, I am sure, would be the opinion of every reasonable individual, that an institution of its celebrity, and respectability, and magnitude, as a medical school, ought to possess, like other large schools, (which I need not enumerate), resources within itself, more instrumental to the instruction of students, whereby they may more profitably fill up the intervals between lectures than they now do; and its greatest omission

is, a new reading room, where all the principal medical periodicals, and class books, ought to be laid upon the tables, and to which the students should have free and unlimited access, not by a right purchased out of their own pockets (for they already pay enough for that privilege), but afforded them out of the growing funds of that wealthy institution: thus would they be enabled to appropriate that time, which they now spend in idleness, to the cultivation of their minds and to the credit of their teachers, who are, or ought to be in a measure, morally speaking responsible for the advancement or backwardness of their pupils' education, and thus would St. Bartholomew's Hospital possess one more acquisition, besides the transcendent talent of Mr. Lawrence, and the indefatigable zeal of Mr. Stanley, to allow the tyro, first launching his bark upon the rippling surface of the river, which flows into the billows and troubled water of life's ocean, to its venerable portals, to seek instruction, and procure information, which is capable, *ceteris paribus*, of laying the foundation of erudition, and power of research, which may one day or other exalt his aspiring soul

" ————— to climb,

"The steep where fame's proud temple shines afar;"

and having reached its highest pinnacle, exalting in his triumph, he may behold beneath him, others who have made the same attempt, dashed down its rugged precipices,

"And sink into their graves, unpitied, and unknown."

I never was struck with the want of such a place, as I have just mentioned; more forcibly than last Saturday, when having waited for nearly two hours, with the impression that Mr. Lawrence was going to operate (for it may be mentioned, the surgeons never post their operations, now as they used, and ought to do), I found that Mr. L. never even arrived, or at least he had not arrived at

twenty minutes to two, (the operating hour is at half-past twelve), when I walked away. Let these gentlemen remember what Cicero, the great master of the human heart, says :

"Horæ quidem cedunt, et dies, et menses, et anni : nec præteritum tempus nunquam revertitur, nec quid segnatur sciri potest."*

I have once more the honor of subscribing myself, Gentlemen,

Your very obedient servant,

A PUPIL.

P.S. I am not ignorant, it may be observed, of the existence of a library at this hospital ; but I think I may add, with truth, that not more than one-third of the students consider a subscription to it worthy of the expense.

This letter may appear like taking advantage of your flattering invitation to address you again, but believe me this is not the case. It was written with the conviction of its necessity ; and if your kindness would extend so far as to give either it, or the substance of the remarks which it contains, a place in the pages of your Journal, those students whom it more immediately interests will be indebted to you solely for being instrumental, at least, in promoting their welfare. I will promise, also, not to trouble you again, except under cases of real necessity, with complaints ; but will vouch myself willing at all times to contribute, as far as it lies in my power, information to you, which shall be entirely at your disposal either to burn or publish, according to your judgment and discretion.

EFFICACY OF SULPHUR IN COLICA PICTONUM AND MERCURIAL PTYALISM.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

As the following case of painters' colic illustrates the use of a remedy not generally administered in that affection, you will perhaps favor me by

inserting it in your valuable Journal.

T. P., a painter, plumber, and glazier, aged about 32, was attacked, in the year 1828, with symptoms of colica pictonum. The usual treatment was had recourse to, purgatives, and opiates—their mode of administration being varied in every possible way ; but the opiates, while they failed completely in relieving the pain and spasms, appeared to have no other effect than that of rendering the constipation more obstinate—the purgatives had no effect whatever. The poor sufferer continued thus for three, or four days, sufficiently tormented by his colic, without the additional torment of the doctor's inefficient treatment, when the consideration of the use of sulphur, in removing certain chronic affections produced by metallic poisons, suggested a trial of that medicine. Accordingly, the sulphur precipitatum was exhibited in doses of two drachms every three or four hours, and with the most decided benefit. In the course of twenty-four-hours the abatement of the symptoms was very considerable, and in about a week he was perfectly well. The sulphur not only promoted a free action of the bowels, but appeared to operate as an antidote, so to speak, to the poison of the lead, though perhaps we ought to consider the former effect as being in part a consequence of the latter.

This person had another attack of colica pictonum in 1831, but as he sent for "other advice" on this occasion I do not know what was done for him. It was said, though I cannot vouch for the truth of the report, that brandy was administered ; be that as it may, from some cause or other, his complaint was suddenly converted into phrenitis, and he died in a few hours.

I have frequently known sulphur succeed in obstinate cases of mercurial ptyalism.

I remain, Gentlemen,

M. S.

April 10, 1832.

* De Senectute. Cap. xix.

ABUSES IN ST. BARTHOLOMEW'S HOSPITAL.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I WAS somewhat surprised at the unhesitating manner in which you denounced my former communication, with regard to the abuses, and the conduct of Dr. Harris, in the operating theatre of St. Bartholomew's Hospital, as being without foundation. Of Dr. Harris's character, generally, I know nothing, but *I deny most positively* that my charge was "*unjustly severe.*" The fact, and the simple *fact alone*, was therein stated. No doubt the circumstances must have proved extremely "*unpleasant*" to the doctor, but I must again deny there being any "*misrepresentation.*" These remarks will, I am sure, find a corner in the next number of an impartial Journal, promoting and defending the interests of all classes of the profession.

I remain, Gentlemen,

ONE OF THE INCOMMODED.

[We had the most unquestionable authority for the statement in our last number. "We are ever ready to defend students and every class of the profession, but never at the expense of truth.—Eds.]

NON-CONTAGIOUSNESS OF CHOLERA.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I AM with you in every thing you say as to the non-contagiousness of the disease, an opinion so strongly borne out by the manner in which the disease has manifested itself in Paris and other parts of France, and though I venture to recommend a moderate course, it is more for the sake of conciliating friends to your useful publication, than to insinuate censure. Cholera, or the pre-disposition to it, has undoubtedly been increased by panic, and society owes to you the preservation of many lives, by the stand which you made against it.

All this only testifies my sense of the high value I set upon your opinion and discernment, for if you adhere to the principles with which you have started your useful publication *must do—and shall do.* If it be not well received by the public, never believe a word more from yours,

A BRISTOLIAN.

MEDICO-BOTANICAL SOCIETY.

At a special meeting of the Council of the Medico-Botanical Society of London, holden on Friday, the 6th day of January, 1832, HUMPHREY GIBBS, Esq. F.H.S., Treasurer, in the chair,

It was Resolved,—That the gold medal of the Society should be offered for the best essay in the English, French, German, or Latin language, on the question, "*What is the vegetable substance which could be employed with the greatest success in cholera?*" And that the silver medal of the Society should be offered for the best essay "*On the analysis of any vegetable substance, the proximate principle of which may be employed in the cure of disease,*" provided that such essay possesses sufficient merit; and that they should be received till the close of the year 1833, and that the medals should be bestowed at the anniversary, January 16th, 1834.

And it was further Resolved.—That as the question, "*What is the vegetable substance which could be employed with success in hydrophobia?*" is a subject of great importance, that the time for receiving essays on the same be extended to the last day of December, 1832.

That each essay shall be accompanied by a sealed paper, containing the names and address of the author, and marked in the same manner as the essay; and that each essay to which a medal is not awarded, shall, according to the wish of the author, be restored to him, or submitted to the Council, in order to its being read at a General Meeting.

G. G. SIGMOND, M.D. Secretary.

London Medical and Surgical Journal.

No. 12.

SATURDAY, APRIL 21, 1832.

Vol. I.

Royal College of Surgeons.

LECTURES

ON THE

ANATOMY AND DISEASES OF THE EYE,

DELIVERED BY

G. J. GUTHRIE, Esq., F.R.S., V.P.R.C.S.

Lecture the Eleventh.

MR. PRESIDENT,

I CONCLUDED my last lecture by pointing out the general causes which give rise to derangements of the cornea, and shall now proceed to take a short view of the diseases of this organ itself.

It is rarely diseased without some affection of the other parts; the simplest complaint to which it is subject is inflammation. There may be simply inflammation of the conjunctiva covering the cornea; the first lamella of this latter part being also affected, from its intimate connexion with the conjunctiva, in which case, a small pustule, terminating in a superficial ulcer, is usually the result. Inflammation of the cornea generally, which is commonly called strumous corneitis, and leads to infiltration between the layers, rendering the cornea opaque in spots, gives rise to enlargement of the vessels of the choroid coat and ciliary processes, and, if neglected, to partial disorganization of the eye. Lastly, to the formation of an interstitial abscess, accompanied by deep ulceration of the cornea, frequently terminating in protrusion of the iris and permanent deposit, if not loss of vision. We shall notice this first under the head of interstitial abscess. This takes place as frequently in children as in adults, and in the former is not confined to those of a strumous habit. In adults it does not appear to have any particular dependance on scrofula, and is in them a more dangerous disease, from the closer connexion which exists between the layers of the cornea, a peculia-

rity which renders the various inflammation and their consequences, much more dangerous in adults than in children.

When the cornea is becoming inflamed, a very slight loss of transparency, a dullness only first perceptible is observed, being perhaps the first symptom indicating what the inflammation is likely to be. The few vessels which have become red are now seen advancing in straight lines, but coming from diverging points. These soon increase in number, and as they approach the cornea form more or less of a zone of a pink colour around it, rendering the diagnosis of the complaint tolerably complete, inasmuch as the iris remains free from disease. There is always more or less of pain, and frequently great intolerance of light; in the pure strumous corneitis, and this is always the case in the acute stage. As the disease proceeds, an opaque spot forms in the centre of the cornea more frequently than in any other part; although it also occurs to either side, and to the under edge of the cornea, rarely to the upper edge. On this spot a superficial ulceration commences externally, whilst the deposit of whitish yellow matter increases, being evidently, however, confined between the layers of the cornea. Whilst this is taking place, a little of the same coloured matter is deposited at the under edge of the cornea, giving rise to an appearance resembling the whole part at the root of the nail, and is therefore called after it an onyx. Upon this point oculistic writers have differed, some applying this term to the interstitial abscess as well as to the matter deposited below. Some believe that the matter of the onyx is also confined between the layers of the cornea; others, of which I am one, that it is usually contained in the anterior chamber, assuming its crescentic shape from its adhesive nature. It is not easy to say whence this secretion comes, whether it is from the inner layer of the cornea, or from the iris, the anterior surface of which at this time, and subsequently the whole of its exterior substance, being engaged in the disease. I am inclined to be-

lieve, that it is a secretion from the inner layer of the cornea, and more particularly from the part opposed to, and confining the interstitial deposit, which in some instances, if not in all, takes on the same sort of superficial ulceration which is going on without. In some cases, particularly in children, the external ulcer is deep and cup-like, in which case there is less deposit and less of onyx than when it is superficial, as it more frequently is in the adult, when there is more danger to be apprehended of the total loss of vision. As the ulceration and deposit increase, the iris changes its colour; the aqueous humour is already turbid; the pain is augmented, and becomes circumorbital. The ulcer soon deepens, another layer of cornea is removed, and the yellowish matter may be touched with the cataract knife or needle if the ulcer be superficial. It may in some cases be removed, but it generally adheres too firmly, and in the attempt the point of the needle often penetrates and allows the aqueous humour, with the matter of the onyx, to escape, when the iris falls forwards against the opening.

If the disease is left to itself, the cornea gives way; in a similar way, a feeling of instantaneous relief is experienced; the aqueous humour is evacuated, the iris falls against the opening, and the eye is frequently lost.

It is of the utmost importance to prevent this, and this can generally be done, by a proper mode of treatment; in adults, and almost always in children, it is not to be effected by bleeding, bark, tartar emetic, or mercury, employed singly. You must take away at first, a moderate quantity of blood, and then have recourse to mercury; at one time I gave this latter in combination with quinine, but by comparative trials I found that it was the mercury that did the good, and not the bark.

If the patient is a child, let two or three leeches be applied; if of seven or eight years old, take away three or four ounces of blood by cupping, and then open the bowels by tartar emetic with sulphate of magnesia; after which, begin with the mercury, one or two grains of calomel with a proper quantity of opium, every two or four hours, until the mouth is affected. You are all aware how very difficult it is to make a child's mouth sore; it will bear larger doses of calomel than an adult, and bear them advantageously. Under this treatment the ulcer changes its characters, and heals, while the onyx disappears; the ung. arg. nitr. or a solution of nitrate of silver, may be had recourse to, to complete the cure. It occasionally happens, that when nearly well, the patient catches cold, and the disease returns; the same means may perhaps prove available, but it is generally the case that the constitution is so enfeebled by the previous treatment, as to be unable to bear a course of mercury, unaided; and if in that case the

combination before alluded to, of bark or quinine with mercury, should be had recourse to, the result will be most commonly satisfactory. If the onyx diminishes, it is a favourable sign, but if it continues to enlarge, it has been recommended to puncture it, and let the matter out. I have done it, but, I must say, not successfully. In the first place, when the cornea is in a state of inflammation, it is not easy to puncture it, it is very painful to the patient, and in many cases the pain has been considerably augmented by it. Greater advantage may be obtained, when the cornea has ulcerated, by picking out the substance deposited, even if the cornea is penetrated; the ulcer heals, the iris adheres, a layer of lymph is effused, and we have merely a leucoma. If the spot is in the centre of the eye, it will be of great avail to dilate the pupil by the belladonna, when the cornea is on the point of ulcerating, as it will serve to prevent the iris falling against the cornea; if the pupil will not dilate, in consequence of the irritation of the iris which is going on, still there may not be an obliteration of it. In some cases, the internal membrane of the cornea may protrude, but this rarely happens from interstitial abscess.

It is the more common result of the cup-like ulcer, and not of the mere extensive, and at first, mere superficial ulcerations. In such a case the bottom of the ulcer should be touched with a fine pencil of argentic nitratum, and pressure applied to the surface in so careful and well regulated a manner, that it shall not give pain. Whether I puncture the cornea, or touch the ulcer with caustic, I always apply pressure; and I have invariably found it advantageous—but it must be done methodically. When the inner layer of the cornea appears elevated at the bottom of a cup-like ulcer, it is called a hernia; when the iris falls forward, and protrudes, it is termed a prolapsus iridis, ceratocele, &c.

When the iris protrudes, it should be induced to adhere to the sides of the opening, as it will serve to prevent its enlarging; and in order to effect this it should be touched with a pencil of lunar caustic, more especially when the edges of the ulcer remain irritable, painful, and transparent. Some think it is necessary to wash the eye after the application of the caustic, but I usually content myself with merely touching it: I do not wish to meddle with it more than is necessary. If the application is successful, a small slough will be detached, adhesive inflammation will be set up in the place of the irritative which previously existed, the iris will adhere, the bottom will be filled up, and no more mischief will ensue. If the cornea is greatly destroyed, the iris falls through, and by the aid of pressure heals, the cornea forming a scale over it, which is generally opaque. This part is always weak, and by the pressure from behind a protrusion takes place, and constitutes what is called staphyloma.

When it protrudes between the eyelids, is very inconvenient and painful, it is necessary to remove it. This may be done either by cutting off the anterior protruding part, or by making a small opening with caustic. I generally use the caustic, and repeat the application if the staphyloma is towards one side, by keeping the opening made by the caustic fistulous for some time; that part of the cornea flattens, and allows of the operation for artificial pupil being performed on the other side, or by flattening brings the pupil opposite to a transparent part of the cornea. When the cornea sloughs, there is little to be done; but it is very different in regard to ulceration. When it takes place on the surface only, it is more satisfactory, because the conjunctiva and one of the layers only are affected, and this generally heals very readily. Stimulant applications, with mercury and quinine, will also usually cure that ulceration which takes place around the cornea, in a groove, as it were, in consequence of pressure, unless it have extended too far.

Acute ulceration.—The cup-like kind of ulcer, which is very like a chancre, commences first in a white spot on the cornea, then the ulcer forms, which enlarges and deepens, preceded by a transparent white state of the parts about to ulcerate, forming a cup, which is exactly fitted to receive a point of nitrate of silver, and that is, in truth, the best remedy for it. It appears to increase in consequence of a peculiar irritation on the surface of the ulcer, and this must be thoroughly removed. This ulcer is not accompanied by ulceration of the internal surface of the cornea, as is frequently the case in interstitial abscess. It goes on, until at last we perceive a slight transparent elevation at the bottom of the cup, and this is a protrusion of the inner membrane. Gentle pressure will sometimes arrest it. If the ulceration ceases, nothing should be done; otherwise, it should be touched lightly with a point of the nitrate of silver, with a view to prevent farther mischief, and gentle pressure should be applied.

Conical Cornea.—In this disease the cornea is protruded in a part, something like a sugar-loaf in appearance; it is transparent, and not opaque until very far advanced. On looking in the eye we perceive a peculiar sparkling, which immediately arrests the attention. Vision is imperfect from the irregular refraction of the rays of light. As the disease goes on, the conical part becomes, the cornea becomes, thinner, and the apex of the cone opaque; that part having become very thin, nature endeavours to support it by a deposition of lymph, which renders it opaque. I have tried all and various means to ascertain the cause of the disease and to cure it, but I must freely confess I do not know in what it consists. It has been said that it is owing to a peculiar action going on in the part, &c., and when we have heard this, we are just as wise as we were before.

It has also been attributed to too great a secretion of the aqueous humour; if so, repeated punctures at proper intervals would appear to be the remedy, but they do no good. No medicines, no means of cure that I have heard of, appear to do good, save one, and that I have only discovered within the last year—it is emetics, combined with purgatives, given at first every night, then every second night, and afterwards twice, or even once, a week. A young woman presented herself at the hospital a year ago with this complaint; the apex of the cone having become opaque in one eye, vision of course being very imperfect in both. Being aware of the inefficiency of all the known means of treatment, I put her empirically on the course of emetics and purgatives; two grains of the ant. tart. and ʒij of mag. sulph. and to my great satisfaction and surprise she began to improve; the opacity of the apex of the cone began to diminish, and her sight improved, the cornea becoming less conical. She now comes once a week for her emetic, and is very thankful for the improvement which has taken place. If this should be found equally useful in other cases, and they are of rare occurrence, it will be an addition to our stock of knowledge. The dose of the tartar emetic will sometimes require to be increased, and when it does not vomit it acts as a purgative.

Opacity.—In some cases the inflammation does not terminate, either in ulceration, protrusion, or interstitial abscess, but in opacity; and this is a disease which will require a long time to effect a cure; it must be treated by stimulants.

Effect of the long-continued use of the Nitrate of Silver in solution.—If the nitrate of silver in solution be used beyond a certain time, say two months, it will have the effect of blackening the conjunctiva. I have seen this effect lately stated in point as a new discovery. I have noticed it every year in my lectures since 1815, and I thought it a fact so old that every one knew it.

SELECTIONS

FROM

MR. MORGAN'S LECTURES

ON

PURULENT OPHTHALMIA,

DELIVERED AT GUY'S HOSPITAL.

Session 1831-2.

Purulent and Gonorrhoeal Ophthalmia.

PURULENT ophthalmia may be divided into three stages; it is essentially a disease of the conjunctiva;—

The first symptoms are redness of the conjunctiva, intolerance of light, and agglutination of the eye-lids.

This disease in adults, differs only in degree from that of infants. Any person having the disease is capable of communicating it to another, but in a milder form, than if produced by the direct application of gonorrhœal matter.

In the first stage, the globe of the eye is free from inflammation; a stiffness and fullness of the lids always precede the other symptoms.

In the second stage, there exists extensive chemosis, not only of the palpebral conjunctiva, but also of that covering the globe itself. In acute purulent ophthalmia, there is much difficulty in separating the eye-lids; they are swollen from effusion taking place.

An ichorous bloody discharge indicates that the globe of the eye is sloughing. There is some analogy between chemosis and phymosis.

When inflammation extends from the lids to the globe, there is an acute shooting pain felt in the globe of the eye.

In almost all cases the patient suffers no febrile disease; it is, therefore, merely a purely local inflammation.

Gonorrhœa is often a cause of gouty and rheumatic pains. It is often produced by introducing a catheter, or by any irritating cause applied to the urethra. Fluor albus produces gonorrhœa. Likewise any irritating matter introduced into the eye produces purulent ophthalmia.

The treatment consists in lessening inflammation by active depletion, and by astringents to alter the morbid state of the capillary vessels. Astringents should never be employed in the first instance in adults.

Gonorrhœal purulent ophthalmia shews itself first in one eye, and afterwards affects the other.

In the first stage of the disease you should have recourse to active depletion, bleed to syncope, never regarding the quantity of blood lost, but the effect produced. The object is not to lower inordinate action, which generally does not exist, but to depress the healthy action of the nervous and vascular systems; then exhibit brisk purgatives, five or six grains of calomel with the compound extract of calocynth from the best that can be prescribed. Follow this up by giving antimonials, to keep up a constant nausea; and thus continue the depressed state induced by the previous depletion.

There exists a sympathy between the stomach, brain, and vascular system; the action of nauseating medicines is not confined to the stomach, but its debilitating influence is communicated to the nervous, and from that to the vascular system.

Warmth and moisture should be applied, leeches to the eye-lids, and a cool and well ventilated apartment is necessary.

Diminution of the size of the eye-lids, and lessened discharge, are the first favourable symptoms. When these occur, astringents

may be had recourse to, but not before; such medicines are in the early stage attended with much mischief; low diet must be still enjoined.

You may first use a solution of one or two grains of sulphate of zinc in an ounce of water, and subsequently apply the solution of the nitrate of silver; five or ten grains to an ounce of water may be sometimes used. The solution of nitrate of silver is far preferable to what is called the black ointment, as it is more likely to remain in contact with a diseased and secreting surface than a greasy application. I have tried both, and, from long experience, I am convinced of the superiority of the solution to the ointment.

In the second stage of the disease, inflammation extends from the conjunctiva to the globe of the eye.

When the cornea has sloughed, apply leeches, use palliative measures, to remove pain, &c.; there is no hope of saving the organ. If the discharge be still white, use prompt measures, as in the first stage.

In a couple of days, the chronic form of the disease may set in, the lids lessen in size, the discharge diminishes, the lids may be opened a little.

If slough has taken place in the axis of vision, depletion must not be carried further, as vision cannot be restored; it is destroyed. If the slough is not so situated, the same course as in the first stage should be pursued.

In case of an ulcer on the cornea, the nitrate of silver is the best local application. It should be pointed like a pencil, and the ulcer touched with it, the eye-lids being immediately closed.

In the third or convalescent stage, there may be a want of action in the part; then you are to exhibit tonics, and pursue a different plan of treatment.

Although you may by the means already referred to, remove the disease, it is still liable to return very frequently.

A modification of the disease occurs in gouty and rheumatic patients; it is then a compound disease.

There is less degree of severity in the symptoms, than in the common purulent ophthalmia.

After the usual remedies are tried to no purpose, the patient complains of pain in some other part of the body, and the purulent discharge disappears; there may be also a purulent discharge from the urethra. The discharge in such cases differs from gonorrhœa, in being more fluid and whiter than usual. Notwithstanding this, the Germans were led to suppose, that in the cure of gonorrhœa, the disease is removed to the eye by metastasis; but this opinion is absurd, for both diseases may continue severe at the same time.

The remedy, recommended by those Germans, consists in reproducing the discharge

from the urethra, by introducing gonorrhœal, matter, &c. &c. The remedy well accords with their views of the disease, both of which, are equally ridiculous.

DR. CLENDENNING'S LECTURE

ON TOXICOLOGY.

*Delivered before the Medico-Botanical Society,
April 10, 1832.*

IN former lectures I laid before the Society certain generalities, relative to prussic acid poisons, consisting principally of illustrations of their literary history and pre-eminent activity. I mentioned that the ancients had some knowledge of this class of noxious substances; that the essential oil of bitter almonds is mentioned by Xenophon and Dioscorides, and the poisonous quality of laurel leaves noticed by Strabo; but the anguis in herbâ, the essential venom of the comparatively numerous class of substances containing prussic acid, was not known before 1772, the date of the discovery of that interesting compound by the Swedish chemist, Scheele. An accurate toxicological history, therefore, of this substance has been practicable only of late years, and more particularly since the frightful energy of the pure acid, first described by Gay Lussac, about sixteen years ago, has occupied the experimental ingenuity of Orfila and Magendie. Formidable as were the powers of the older forms, especially of the dilute acid of Scheele, they are greatly exceeded in murderous energy by the purer substance furnished us by Gay Lussac. A small bitch, ex. gr., to which Orfila administered sixteen drops of Scheele's acid, after convulsions and other functional disturbances, recovered fast, so as to be able to eat even voraciously at the end of an hour. On the contrary, a vigorous dog, to which Magendie gave as much of the acid as adhered to the end of a small glass tube, which he had dipped in a bottle containing a few drops of the prussic acid, fell stiff dead after two or three deep and hurried inspirations, which commenced the instant the tube touched the tongue of the animal. Again; Orfila injected nearly half an ounce of cherry laurel water into the jugular vein of a dog, which was almost convalescent in twenty minutes, and quite well in a day or two. Whereas Magendie killed a dog instantaneously by injecting into the same vessel a single drop of Gay Lussac's acid, dissolved in four drops of alcohol.

It has also been but very recently ascertained, that prussic acid is an universal, not a relative poison. Not only is the prussic acid noxious to the higher animals, in various

degrees, no doubt according to strength and size, and according to the nature of their food, a drop or two injected into a vein producing, in the feeble and carnivorous dog, the like effect with half an ounce in the powerful and frugivorous and herbivorous horse, but it is proved, by the experiments of Emmert, Coullon, and others, to be little less deadly to fishes, reptiles, insects, and worms; and still later experiments have greatly enlarged the destructive domain of this poison. From the experiments of Becker, Marcet, Schreiber, Schübler, and Zeller, it appears that the sensitive plant, when exposed to the vapour of prussic acid, instantly closes its leaves. The same plant, as well as other tender plants, such as the garden pea, the kidney bean, when subject to the influence of this acid, quickly wither and die, and that laurel water has the same effect upon them. It appears also that plants which naturally contain the acid, such as the cherry laurel, and almond tree, are not less susceptible of its poisonous action than others. It appears even that plants enjoying but a dormant, and as it were but a potential, existence, are not exempt from its poisonous influence, for Becker found that seeds steeped for some time in the acid lost their power of germination.

Forms.—The natural forms of prussic acid poison are the kernels of the bitter almond tree, of the apricot, the cherry, and of different sorts of plums; the peach flower; the leaves of the peach, nectarine, and cherry laurel trees; the bark of the bird cherry tree, and probably the pippins of some apples, pears, &c. Of these the *prunus padus*, or bird cherry tree, and *prunus spinosa*, or black thorn tree, are indigenous to this country. The artificial forms are—distilled water of cherry laurel, the essential oil of almonds, *kirschen wasser*, or cherry brandy, ratafia, macaroons, and other cordials and confectionary having the odour and taste of bitter almonds; and to this of course must be added the officinal forms, of which the only one in much use is the medicinal hydrocyanic acid. We might further mention the soluble prussiates and cyanurets, which however are little known in medico-legal practice. Of all those forms the operation is essentially the same as is the noxious element, varied only by dose, state of combination, and other incidental circumstances. They are none of them of frequent occurrence in these islands, and even Dr. Christison's account of them seems founded, principally, on the observations of foreign writers; and for my part—exclusively of the occasional inconveniences of full doses of medicinal prussic acid, employed in the treatment of pectoral complaints principally—I have had no personal experience of its poisonous effects upon man, and I am indebted mainly to Professors Christison, Orfila, and Marx, for the materials of the present address.

Symptoms.—The symptoms produced by

prussic acid, in doses excessive, but not necessarily perilous to life, are well described by Dr. Coullon, and though belonging rather to materia medica than toxicology, may be stated as follows: quick pulse, anxiety, ptialism, nausea, head-ache. A very large but not quite fatal dose has produced the following effects in a French physician, whose case is given in the *Review Medicale* for 1825:—

“Very soon after swallowing a teaspoonful of the diluted acid (says Dr. Christison, from whom, not having the original beside me I quote) he felt a confusion in the head, and soon fell down insensible, with difficult breathing, small pulse, bloated countenance, dilated and insensible pupils, and locked jaw. Afterwards he had several fits of tetanus, one of them extremely violent. In two hours and a half he began to recover his intellects, and rapidly became sensible; but for some days he suffered much from ulceration of the mouth and violent pulmonary catarrh, which had evidently been excited by the ammonia given for the purpose of rousing him. This gentleman had eructations, with the odour of the acid three or four hours after he took it, and during the earlier symptoms the same odour was exhaled by his breath.” The best account of the effects of a fatal dose is given by Hufeland, in his *Journal der Prakt. Heilkunde*, b. 40. It is the case of a man (I again, for the same reason before named, quote Dr. Christison), who being apprehended for theft swallowed an ounce of alcoholized acid, containing about forty grains of the pure acid; he was observed immediately to stagger a few steps, and then to sink down without a groan, apparently lifeless. A physician, who instantly saw him, found the pulse gone, and the breathing for some time imperceptible. After a short interval he made so forcible an expiration that the ribs seemed almost drawn to the spine; the legs and arms then became cold; the eyes prominent, glistening, and quite insensible; and after one or two more convulsive expirations he died, five minutes after swallowing the poison.”

The periods within which prussic acid begins to operate, and is capable of proving fatal, are better ascertained than those of most other poisons. From the experiments of various physiologists, and from observations on man, it appears that the symptoms it produces very rapidly follow its application; that in large doses it may prove fatal in a few seconds, and if the subject survive the first half hour of its action, there is good hope of his ultimate recovery.

Necrotomic appearances.—With respect to necrotomic phenomena, the principal and least frequently wanting are fluidity, and a præternaturally dark colour of the blood, and inexcitability, in some cases even by galvanism, of the muscular system. To this I may add, a strong smell of prussic acid, detectable in various parts of the body for

some short time after death. This, we are assured by Schubarth, (who seems particularly to have investigated that point) depends principally on the interval between the application of the poison and the death of the subject. If the dose be sufficient to prove fatal in a few minutes, the blood of the heart, lungs, and great vessels will generally yield the odour of the acid; but if the subject survive for a quarter or half an hour afterwards, the odour may be altogether wanting. This speedy disappearance depends, he says, upon the rapidity with which the acid escapes in vapour by the lungs. Should the examination of the blood be deferred for some days there is little chance of detecting the poison by the sense of smell, or indeed by any other test, however rapid it may have been in its operation, owing to its subtlety and volatility in the first instance; and secondly, to its fragile chemical composition. A remarkable effect of the prussic acid poison, which Dr. Paris considers quite characteristic, is an appearance of the eyes, very unlike that of death. “After poisoning with prussic acid (says Marx, in his *Lehre Von den Giften*), even several hours after death, the eyes are found bright and animated, though utterly devoid of irritability,” which occasioned Hufeland’s expression, “the clear fiery look must (in such cases) excite apprehensions that the victim may be consigned, yet living, to the grave.”

Treatment.—The principal remedies known for poisoning by prussic acid are—ammonia, alcoholic, and other diffusible stimulants; chlorine, and cold affusion. The use of ammonia was brought into notice first by Mr. Murray of London, and its efficacy has been recognised by Hermbstadt, Ittner, Orfila, Christison, and most other toxicologists. Mr. Murray’s words (in the 7th vol. of *Ed. Phil. Journ.*) are, “I have no hesitation to pronounce, with positive certainty, that in ammonia will be found a complete antidote to hydrocyanic acid, and in acetic acid, an effectual counter poison to opium.” Coullon and Riantz recommend chlorine in preference, and the celebrated Emmert has seen excellent effects from the oil of turpentine, of which latter remedy Dr. Granville also speaks very favourably. The latter acute physician conceives that “all medicines, from the class of diffusible stimuli, will be found in most cases to answer the desired effect,” as for example, brandy and water; indeed I believe it is on the principle of diffusible stimulus, otherwise general excitement, that the salutary action of ammonia, turpentine, camphor, nay, even of the shock of the cold affusion, is most satisfactorily to be explained. The last-mentioned agent, viz., the cold affusion, or dash, Dr. Herbet of Gottingen has found a very powerful remedy, and his opinions have been, in a great measure, confirmed by Orfila. Of each of those remedies their efficacy is pretty well ascertained, so

that in treating a case, a judicious physician would combine them as much as possible, employing at the same time cold affusion and inhalation of the fumes of chlorine, or of largely diluted aqua ammonia. If I recollect rightly, the efficacy of ammoniacal inhalation was well illustrated in experiments instituted in this city a year or two ago, by various persons who disputed the pretensions of Mr. Chabert, the fire-king, to the power of swallowing prussic acid with impunity. That, however it is not, strictly speaking, an antidote, as Mr. Murray conceived, is proved by this single fact, mentioned by Marx in the very learned work before quoted. Twenty drops of prussic acid, saturated with caustic ammonia, proved fatal to a dog in twenty minutes; whereas a dose much less considerable of the uncombined acid would not prove fatal at all. From less than twelve to sixteen drops of prussic acid, an average sized dog will scarcely die, even without medical aid.

In cases of poisoning by bitter almonds, by confectionary seasoned with prussic acid, &c. emetics may perhaps sometimes be useful. The introduction into the stomach of a solution of a ferruginous salt, containing protoxide of iron, as the green vitriol of commerce, which usually or always contains the protoxide, some aqua potassæ, properly diluted, having previously been swallowed or injected, might possibly, in some instances, be tried with advantage. The formation of an insoluble, and therefore innocent prussiate, would necessarily be the immediate result. The free prussic acid in the stomach would thus be neutralized, and the mischief so far corrected. The use too of chemical antidotes, or of emetics, might easily be combined with inhalation of chlorine or ammoniacal vapour, and without much difficulty, even with cold affusion. There is, however, it must be confessed, one capital objection to the use of either; the operation of the poison is singularly rapid, and a very few minutes must determine the fate of the sick, if the dose have been sufficiently large. If the uncombined acid have been taken, loss of voluntary power, convulsions, &c., ensue almost immediately; the patient will probably be found unable to swallow, and there is no time to spare in looking for antidote ingredients, employing injecting, apparatus, &c. It is, therefore, desirable that the attention of the practitioner be not distracted by the recommendation of remedies of less easy application, and of uncertain value, to the neglect perhaps, or at least inefficient employment of, other more speedy and of better established utility. Of this objection I fully perceived the weight; but I still think that cases may occur in which the introduction into the stomach of the antidote above mentioned, or of a solution of nitrate of silver, or still better perhaps, of a solution of blue vitriol, which if previously rendered alkaline, might act doubly, if decomposed, in so far of course as an antidote,

and if not decomposed, altogether as an emetic. I still think that the use of one of these antidotes, or in lieu of it, of an ordinary, emetic, aided by tickling the fauces with a feather, might in some cases prove of very good effect. The use of the latter remedy, viz., an emetic, I should think particularly worthy of trial in cases of poisoning by confectionary, bitter almonds, or other solid form of prussic acid poison. Of an objection to the use of a copper or silver antidote, founded on the poisonous nature of cyanogen, I am aware. Doubtless if the cyanuret of copper or silver, supposing such to result, should be decomposed by an acid in the stomach, a poison would be disengaged, probably little less formidable than the acid itself. But the slowness with which very dilute acid solutions, and such only could be met with in the stomach, act upon powders, is perhaps a sufficient answer to this objection; since if but a few minutes could be gained, and the diffusion through the system of the acid be for a very short time delayed, the stomach might be cleared out by an emetic. The value, however, of such conjectural proposals must be determined by future experiment.

Theory of disease and death by prussic acid.—The modus operandi of prussic acid poison is a question not yet solved. It is by high authorities supposed to act mainly, if not quite exclusively, through and on the nervous organs, or, in other words, by sympathy; but I cannot help entertaining some doubts of the accuracy of that doctrine. We have already seen that plants are rapidly poisoned by prussic acid, and that even seeds are subject to its destructive influence. Philosophers have dreamed of vegetable feelings, and poets sung of the loves of the plants, but it is not the less certain that feeling and passion exist in nature only in connection with nervous matter, and plants contain, so far as we know, no organs of that kind. The circulation of vegetable blood also is dependent on no heart; and vegetable respiration, assimilation, &c., are equally, with the process of the sap, independent of nervous stimulus and muscular irritability, and are, like that leading function of plants, performed mainly, if not exclusively, by physical agency, and by forces either chemical or mechanical. From analogy, therefore, other than nervous lesions should be admitted to precede death in animals poisoned with prussic acid, and the fluids, however much despised in these days of solidism, should be admitted into our list of claimants for some share of the effect. A doctrine, however, has emanated from the French school of physiology, or at least has received its fullest developments, and enlisted its most zealous advocates in that school, which is calculated to neutralise the *vis consequentiæ* of the analogies just alluded to. Corresponding to the gradations that we observe in the animated creation, beginning at the sponge or somewhere there about, and extending

upward to the Corinthian capital of zoology—man, there exists, we learn, amongst the organic systems of individual animals, also a scale, having for its lowest grade the assimilative function, and for its apex, or highest point, the cerebral functions, as developed in the human species. Amongst these functions, the higher in the series exercise control over the lower, the whole association of organs being subaltern and subject to the nervous system, from which, as a centre, emanates, in the superior animals, every impulse, and which is the focus and fountain head of all vital power. With the disciples of this school, amongst whom it appears to me we reckon many eminent living physiologists of this country, as Mr. Brodie, and Dr. W. Philip, it is of no use to refer to plants, zoophytes, &c., as possessed of secretory, calorific, assimilative, and other such functions—even the existence, beyond all doubt, of all the phenomena characterizing these organic actions, in animals of the human species (I allude to the acephalous fœtus, in which the brain and medulla are but partially developed, or are altogether wanting,) is insufficient to prevent the adoption by many acute and learned men of the doctrine of nervous supremacy; a doctrine which, *me judice*, resembles the hypothesis of an Indian philosopher, mentioned by some traveller, and alluded to by Mr. Locke, and which supposes the world to be supported on the back of an elephant. Nor is it defective merely in that it but ill accords with observations, it offends likewise, as I think, against that law of inductive logic so well known since the time of Newton that which excludes superfluous causes. Instead of representing animal being as maintained by one uniform set of forces, it teaches that the source of functional power varies with the place occupied in the scale of creation. Whilst in plants, zoophytes, worms, &c., animation is admitted to be maintained by forces common to all organised beings, and the pyramid of life is therefore allowed to rest on its base. The contrary is maintained in the case of the higher animals, and in favor more especially of man; an exception is made that exempts him to a very great extent, if not altogether, from the influence of those fundamental forces that rule the great mass of organised matter. The assimilative, calorific, and other functions, are in zoophytes, acephalous monsters, &c., admitted to be performed, as I understand the doctrine, by powers independently possessed and exercised by the organs of those functions; whereas, in perfect mammiferous animals, the pyramid is set on its apex, for the instruments of these functions are declared dependent on extrinsic influences for their vital powers, and digestion, calorificity, respiration, excretion, &c. become possible only by virtue of nervous influence and innervation.

The physiological theory of life, therefore, of each class of organic beings is different more

or less from that of every other class, whether above or below it in the scale, while the leading vital forces of classes, occupying opposite ends of the scale, are derived from sources not merely diverse, but even to a great extent opposite, and are to be estimated and reasoned upon according to principles, having little if any thing in common with each other.

To this theory I have never been able to subscribe. I am well aware of the eloquence, sagacity, and learning of many of its supporters; but I am not the less convinced that it is not an induction from an impartial review of ascertained facts. To me it appears a premature and abortive attempt to solve a question, for the satisfactory solution of which facts are still wanting; an off-shoot of that intolerance of delay and impatience of ignorance, so natural to inquisitive and active minds. I conceive, in a word, that the doctrine under consideration is founded on false views of the relation between the brain and other less noble parts, solid and fluid; and that the time is yet distant when views more correct and sound will be attainable.

But turning from those high physiological problems, which have led me perhaps too far out of my proper path, and fixing our attention on the *modus operandi* of prussic acid in the production of comatose, epileptic, and other symptoms, whose immediate causes must be cerebral mischief, we find ourselves at the very outset embarrassed by the number and weight of conflicting observations and authorities, and obliged to acknowledge the subtlety and difficulty that so frequently envelop medical researches.

In this, as in other instances of very extended, not universal, functional derangement, since there are but two systems combining at once, in an adequate degree, physiological importance with extent of anatomical distribution, viz. the blood and nerves, we must necessarily choose one or other of them as the channel of communication and diffusion, or else regard them as conjoint ministers to the noxious influence. The instant, however, we set about determining to which the right exclusively belongs, or in what shares if they co-operate, the effect is to be divided between them, we encounter at once two classes of facts, tending in different directions, and apparently irreconcilable. The one which has attracted most attention, and exercised the most decided influence on dogmatic physiology and toxicology, seeming to prove the *encephalon* and *medulla spinalis* the primary and principal seats of poisonous action:—the other class, equally authentic, more numerous, but unfortunately, as I think, for the interest of sound doctrine, less striking and obtrusive, leading to the conclusion that death from prussic acid is owing to preliminary vitiation of the blood, which, grown poisonous from the change, immediately deranges the cerebral and other functions. The

facts alluded to are shortly these;—fatal symptoms, and death itself, have often been observed to follow the application of prussic acid so rapidly as apparently altogether to exclude the supposition of possible admixture with the blood, whether by vascular absorption or physical imbibition. Several instances shew that death from contact with mucous or serous membranes may be as rapid as by injection. For example—Mr. Brodie informs us in the "*Phil. Trans.*" for 1811, that one drop of essential oil of bitter almonds applied to the tongue of a young cat, was instantly followed by violent convulsions and other fatal symptoms, and by apparent death, within five minutes; and that in another experiment the injection into the rectum of a cat of two drops of the same oil with half an ounce of water, produced in two minutes the symptoms just mentioned, and in five minutes apparent death. In his own person likewise; having applied to his tongue the blunt edge of a probe which he had dipped in the same oil, he immediately felt in the epigastric region a very remarkable and unpleasant sensation; also a sense of weakness in his limbs, as if about to fall down from inability to sustain himself in the erect posture. And Mr. Macaulay, we are informed by Dr. Christison, observed death to follow the introduction of considerable quantities of the dilute acid into the throats of dogs, in the short space of eight, seven, and even of three seconds. Other arguments to the same purpose are these:—2ndly, the arterial blood of an animal under the influence of strychnine poison is, it would seem, not poisonous; a third fact is, that poison of the strychnine class introduced into the jugular vein between ligatures, will act with as much rapidity if but one ligature, and that the one farthest from the heart, be removed, as it would after the removal of both:—and a fourth is, that of two dogs, having each a carotid artery and jugular vein divided, and re-united by tubes to the reciprocally corresponding ends of the vessels of its fellow animal, the dog, into the flesh of the face of which poison was introduced, suffered as usual, while the other dog remained unharmed during the whole experiment. And if in these experiments prussic acid had been used instead of strychnine, analogous results, *mutatis mutandis*, would, it is not unreasonably presumed, have been observed.

To these I may add, that the action of strychnine poison on the brain has been found in no degree accelerated by injecting it into the carotid, but has been found equally rapid upon injection into the femoral artery. Now these facts (assuming that under like circumstances prussic acid would have given like results), tend unequivocally to the conclusion that prussic acid acts by sympathy and nervous transmission. On the other hand, the following facts present themselves, pleading powerfully for a different, if not opposite theory;—in the first place, we

have the undoubted and astonishing fact verified by many experiments, that the brain and nerves are quite insensible to the action of prussic acid, as well as to almost every other poison of sympathetic or remote action. Viborg, of Copenhagen, applied nearly a drachm of concentrated acid to the brain of a horse, previously laid bare by trepan, without any effect whatever. Like results have been obtained by Coullon, Krimer, Emmert, and I believe by others. Another very remarkable fact to the same purpose is that ascertained by Emmert, that the action of the poison may be prevented by previously tying the artery that supplies the part to which it is applied. A third fact is that ascertained by several experimentalists—viz. that the previous division of the nerves supplying a part, furnishes no protection against the poison. Several experimentalists, among the rest our distinguished countryman Mr. Brodie, have found that if, of the extremities of two animals into each of which extremities poison has been introduced, the one extremity be left connected with the trunk by the nerves only, and the other limb or extremity by the blood-vessels only, poisoning will happen but in one of the animals, namely, that whose nerves are divided, its blood-vessels remaining entire. Mr. Brodie found also that in an animal, whose limb has been poisoned, general poisoning will depend on the condition of the circulation. Whether the nerves be divided or not, poisoning will not occur, or will be suspended if the circulation be timeously arrested by ligature; and will proceed in the usual way if the current of the blood be not obstructed.

A fourth fact is, that the blood often evinces its vitiation very unequivocally—by loss of coagulability, by change of colour, by giving fumes of prussic acid, and by answering to the tests of that acid; of which more hereafter.

5. Another fact is, that the acid is a deadly poison to every inferior animal—the cold-blooded, however, being apparently less susceptible of its noxious action, as they seem to be of most, or all poisons. 6. The last fact I shall refer to is that already above mentioned, that it is a deadly poison to all plants, the parent species, ex. gr. the *lauro cerasus* not excepted. To reconcile these apparently conflicting facts, but one middle term, I believe, has yet been suggested, and that one involving not a little of novel and difficult hypothesis—viz. that founded on the results of the highly interesting and important researches of Dr. Addison and Mr. Morgan, and which ascribes the propagation and diffusion of poisonous influence to the instrumentality, exclusively of the vascular nerves. This theory of these very able experimental toxicologists, has obtained the approbation of the accomplished Professor of State Medicine in Edinburgh, and is on that account, independently of the high merit of

its proposers, deserving of our most respectful consideration. To my mind, however, it has not given satisfaction, for reasons however of which I cannot, from regard to economy of time, here undertake the development.

So much, in general, touching the essential nature of poisoning by prussic acid. I shall terminate this section by an account of the sensible or apparent organic causes of death. The nobler parts on which prussic acid exerts an unequivocal influence, are the brain, the medulla spinalis, and the heart. On the two former its action is most uniform; appearing when given in ample doses in the form of apoplectic seizure, and coma, of general convulsion, and of tetanic spasm of the pectoral and other muscles. Its fatal effects are owing, according to Messrs. Brodie, Nysten, Weideman, and others, to the suspension of the cerebral functions. Messrs. Emmert and Mayer, Bedingsfield, Magendie, Delille, and Cortimbert seem, on the contrary, to consider the medulla spinalis as the principal seat of the noxious action of narcotics, and amongst the rest, no doubt, of prussic acid. Sometimes, I believe, the immediate cause of death by prussic acid is *asphyxia*, produced in the same manner as by strychnine—namely, by tetanic spasm of the pectoral muscles, fixation of the ribs, and consequent suspension of the respiratory movements. When taken in relatively large quantity, it produces what, in a former lecture, I have described under the name of *instant death*, an effect which, though not quite peculiar to it having been occasionally observed to follow the application of several other poisons, the viper bite, for example, as we learn from Paletta, the use of strychnine, as we know from Segalas; still, an effect much more readily produced by prussic acid than by any other noxious substance. In many instances the heart has been found, after general death, beating nearly in the normal manner in animals destroyed by the acid; but it would seem, notwithstanding, that syncope is an occasional proximate cause or mode of death from this substance. Of all modes of applying prussic acid, the most deadly is injection; next after that, I believe, we may rank its introduction in vapour or fluid into the lungs. The serous membranes give very rapid passage to this poison, more rapid it appears, considerably, than the mucous membrane of the gullet, or of any other part, the lungs only excepted. The only soft organs on which this poison would seem inert, are, strange to say, the brain and nerves. Even through the skin prussic acid seems capable of transmitting its destructive influence, a channel which we know is closed to most other poisons.

Mode of Detection.—Prussic acid, although with the exception of gaseous poisons, the most volatile, diffusible, and easily dissipated, perhaps, of all noxious substances, is, notwithstanding, one of the easiest of detection.

Its sensible qualities and chemical affinities are such as to enable an investigator, of even moderate skill, to demonstrate with certainty its existence in very complicated mixtures when present, in even very minute proportions. In medico-legal practice, however, there are difficulties to encounter that greatly limit the utility of the tests referred to in the detection of crime. Those have been partly explained already, under the head of necrotomic appearances. The extreme volatility and diffusibility of prussic acid enable it rapidly to permeate the tissues interposed between it and the internal surface of the lungs, and thus to escape with the air in expiration, so that if the animal survive for many minutes the injection of the poison, there may be actually no prussic acid remaining to be detected after dissolution. Dr. Granville estimates this difficulty, I suspect, much too highly. In his work on this acid (2nd edition) he states in several experiments on dogs and cats, then recently instituted by himself, in conjunction with other gentlemen, he has been unable to detect the poison, even "one minute after its exhibition," and "supposes, therefore, it must have been partially, if not wholly absorbed, ere it reached the stomach." There are, however, in such experiments, obvious sources of fallacy to which he does not allude, and which he may have inadequately attended to, so that it is not easy to say how much confidence we should place in his inferences. Another source of disappointment to the forensic physician, is the frailty of chemical constitution that characterises the acid. This is such, that in a series of experiments instituted at Paris for the ascertainment of the amount of this source of failure, it appeared that in the bodies of dogs destroyed by prussic acid, and immediately buried, no trace of poison could be detected after the lapse of eight or ten days, during which they remained in the earth.

It must be expected, therefore, frequently to happen in medico-legal practice, that access to the body will not be obtained until the poison shall have been either dissipated or decomposed, and until, consequently, it will be impossible for the magistrate to avail himself of chemical skill in the pursuit of crime.

Tests—The tests most commonly employed for the detection of prussic acid, are the smell, the taste, and the reaction of the suspected substance on the addition of certain saline solutions—viz. the solution of nitrate of silver, sulphate of copper, and of any salt of iron containing the black oxide of that metal. Of these tests the most delicate, but perhaps least certain, is the sense of smell; while the ferruginous solution, one of the most delicate, is, perhaps, the most certain of all. The copper test appears, from the latest researches, to be less delicate considerably than the iron, while from the paleness of the colour of the precipitate, which when pure is

white, and not easily distinguished from numerous other precipitates, it is quite useless except in colourless, or nearly colourless fluids. The sediment furnished by the nitrate of silver is also white, but it has two other very characteristic properties—viz. nitric acid will not dissolve it, except at very high temperatures; and the precipitate in the dry state gives out, under the influence of the spirit lamp, an abundant stream of cyanogen gas, which is easily known by the rich roseate colour of its flame. But the tests, perhaps, most worthy of our confidence, are the smell, when distinct and unequivocal, and the formation of Prussian blue on the addition of a solution of iron. The former test, Orfila assures us, will detect the acid in solutions so dilute as to foil the chemist. Speaking of the use of this test, Dr. Christison very judiciously remarks, that the sensations of no one individual should be relied on, and that we should not decide without having compared the statements of different observers. By means of this test the presence of prussic acid has by various observers been ascertained in the blood of the heart and great vessels, all through the chest, and, if I rightly remember, even in the brain.

The ferruginous test, as already mentioned, is delicate, easy of application, and unequivocal. Synthetically it will, I believe, detect the acid, slowly indeed, but certainly, inasmuch perhaps as 25,000 or 30,000 parts of water; and the correctness of the synthetic proof can be established analytically, a position which holds comparatively of but few poisons. By means of sulphuric acid, aided by heat, the acid can be re-obtained in an uncombined state, and identified by any of its tests. The only precaution necessary for the application of the ferruginous test, is the addition of caustic potash in quantity, sufficient to render the solution alkaline. So prepared, it yields, on the addition of the ferruginous salt, a greenish blue precipitate, which immediately, on the addition of sulphuric acid, or gradually, under free exposure to the atmosphere, becomes of a brilliant indigo colour. By more or fewer of these tests, the acid, if present in any appreciable proportion, may easily be detected; but, to the successful application of most or all of them, it is obvious that in practice some preparatory steps must often be necessary. The first test, the sense of smell, will not be available if other strong smelling substances be present; and chemical re-agents require a certain degree of transparency in the mixture. To remove these impediments, when very complicated mixtures, such as the contents of the stomach, the heart, &c., are to be examined, either of two methods may be employed. One consists of mechanical purification by the filter, and decolorization by animal charcoal; the other, the isolation of the acid by distilling the mixture at a low heat. The

former process is more easy of application, but probably less sure, for if the charcoal fail to decolorize the fluid sufficiently, the tests will not be available. Should, however, a sufficient decolorization be obtained, the ferruginous test may at once be employed. If this process, however, should fail us, distillation must be had recourse to. The mixture is to be filtrated, rendered neutral by sulphuric acid, and then heated in a vapour-bath, until about an eighth part shall have been vaporized and condensed in the receiver. The contents of the receiver, if prussic acid be present, will readily answer the appropriate re-agents. This is a process first proposed by MM. Lauret and Lassaigne, and since adopted as the best by Dr. Christison. I am not aware of any important objection to which it is liable.

ON PARTIAL FRACTURE OF THE LONG BONES IN CHILDREN.

By JOHN HART, M. R. I. A.,
Surgeon to the Dublin General
Dispensary.

THE bones differ very much in the relative proportions of the animal to the earthy part entering into their composition at different periods of life, a circumstance which materially affects both their liability to fracture and the length of time necessary for the accomplishment of reunion in individuals of different ages.

Thus, in infancy and childhood the animal part of the bones bears a greater proportion to the earthy, whence they possess a greater degree of flexibility. It is owing to this that fractures rarely happen in young children, notwithstanding the many falls to which they are subject, before they have acquired the power of maintaining their equilibrium in their earlier essays in walking.

On the other hand, the bones of persons advanced in life, are harder and more brittle, in consequence of the accumulation of an increased proportion of the earthy part, to which is to be attributed the more frequent occurrence of fractures of the long bones, in elderly persons especially.

As the bones of children are less liable to fracture, from the cause

assigned above, so is the process of their reunion more speedily accomplished, inasmuch as their growth being still in progress, the blood-vessels engaged in the function of their nutrition are in a more vigorous state of action; while in the case of older persons, whose bones contain a less proportion of the animal part, and more of the earthy and saline constituents, reunion proceeds more slowly, because ossification being completed, the nutritious blood-vessels which were actively engaged in that process have fulfilled the task which was allotted to them, after which these vessels undergo a diminution in size, and a corresponding relaxation in their activity.

While the long bones of children are still soft and flexible, they are subject to a kind of injury, the occurrence of which is incompatible with the brittleness of the same organs in adults. This injury is a fracture which extends through a part of the diameter of the bone, the remaining part becoming bent in the manner in which a branch of a tree yields to an attempt to break it whilst it still retains its sap.

It has fallen to my lot to meet with five cases of this injury within the last three years, one of which occurred in the humerus, two in the radius, and two in the femur; and as this kind of fracture is not particularly described in any of our systematic works on surgery, nor in any periodical publication to which I could obtain access, I shall briefly notice the particulars of one case, and conclude this paper with one or two remarks on it.

Tuesday, February 10th, 1831, I was called on to see Richard K., a child aged ten months, in consequence of an accident, of the nature of which his nurse affected ignorance. I found him labouring under the following symptoms: pain caused by handling the left thigh, which presented a marked deformity, having an

angular projection forwards about its centre. On comparing this limb with the opposite one, it did not appear shortened, nor was there any turning out of the toes. A straight line from the great trochanter to the outer condyle, measured about a quarter of an inch less, while a line from the great trochanter obliquely across the front of the thigh to the internal condyle of the femur, gave a little better than a quarter of an inch more than similar measurements made on the opposite thigh.

I applied splints and bandages, which were removed on Saturday, the 21st, the eleventh day from the occurrence of the injury, when firm union had taken place. At this time the limb differed from the opposite one in no other respect than in having a slight prominence on the front of the femur, at the place where the fracture had occurred.

January 16th, 1832. I this day saw the child R. K., eleven months after the accident. There is no perceptible difference between the lower limbs of both sides, with the exception of a slight ridge which can still be felt on the front of the femur at the place of the former injury. He is beginning to walk, and makes equal use of both limbs.

The diagnostic symptoms of this affection are very simple, they are the following: pain and a bent state of the bone injured without absolute shortening of the limb, on the contrary it is lengthened on the side to which the ends of the fractured part of the bone project. By attending to these circumstances it will be always easy to distinguish this injury from ordinary complete fracture.

Treatment.—The first indication in the treatment is to straighten the bent bone; to effect this, much care and delicacy of manipulation are required, for if it be rudely attempted, with a force too great or too suddenly applied, the part of the bone which was merely bent may be broken, and the fracture rendered a complete one,

the difficulty of treating which, without deformity, will obviously be greater in a child than in a person who can understand the necessity of submitting to restraint.

The next indication is to prevent the recurrence of the deformity, and to keep the fractured surfaces in contact until they become united by callus, and this is to be fulfilled by the judicious use of splints and bandages, as in ordinary fractures.

I need hardly remark on the shortness of the time (eleven days) in which reunion was completed in the above case: it illustrates the principle laid down in the commencement of this paper, which refers to the rapidity of the reunion of fractures in children, owing to the more active state of the vessels engaged in the business of ossification at that period of life.—*Dublin Journal of Medical and Chemical Science.*

CHOLERA CONTAGIOUS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I HAVE every reason to hope, from the liberal manner in which you have determined your Journal should be conducted, that you will favour me with the insertion of the following. First, I must state, that I, like yourselves, have never altered my opinion of the disease now prevalent, called cholera morbus. I always believed it to be contagious, and do so still. I never believed it to be the common endemic cholera of this country, which was described by Sydenham as having occurred in 1669. Neither can I agree with you, when you say (in No. 4), that the inference from his description, must be manifest "to all honest men." My honesty was never yet called in question, and yet I have the *audacity* to differ with you in opinion. You state that the vitiated humours he spoke of may be fairly set down for rice-water evacu-

ations, and I answer, so may a hundred other sorts of alvine evacuations, more especially when you consider that at one time every disease to which the human frame is heir, was attributed to vitiated humours, and is, even yet, by one distinguished surgeon (Mons. Leroy, of Paris). But where did Sydenham mention the suppression of urine, and the extraordinary lividity of the skin? and is it likely that a man, whom you term the English Hippocrates, should have overlooked such remarkable and characteristic symptoms? Now, as to the rest he described, they are nothing more than every one has seen who ever witnessed a case of English cholera. When the cholera morbus broke out at Sunderland, Mr. Searle and Dr. Daun went to see it there; and these gentlemen agreed that it was the same disease they had witnessed at Warsaw. How came it at Warsaw? and was the same constitution of the atmosphere then there, which you state is now here? and what difference did the last month of March show, either in the atmosphere or weather, to those of preceding years? You must, however unwillingly, say none. Yet, during that month, a large number of individuals have fallen victims to the disease. What Mons. D'Arcet says about the atmosphere may be all very correct; but I have exposed litmus paper in a similar manner, and for a longer period, and have obtained no such result. Respecting his cough nearly all his countrymen have always experienced the same, when they quit- ted their own pure air to come amongst our fogs (which Dr. Johnson calls a happy climate). However, there is no proof that the atmosphere is affected in any extraordinary manner, and until such proof be adduced I shall not believe it is so. My reasons for believing it to be the Asiatic cholera, and contagious, are these:—because I find that it first broke out at Jessore, in August, 1817; or if this was not the first place of its showing itself, it was the first at which it was

properly and accurately described, and therefore ought to date from that period. Its violence being appalling, the inhabitants flew in all directions, and amongst other places, undoubtedly to Calcutta, where it broke out in September. In October, 1818, it visited Madras, after that Ceylon; but you would deny inserting this on account of its length, were I to track its course too minutely—therefore, may it suffice to say, that it shewed itself at the Mauritius, Molacca, in China, Bombay, Syria, Mesopotamia, and thence entered the Russian territory; after that it attacked Poland, Prussia, and Austria, then following the course of the Elbe, broke out at Hamburgh, and at that time, was not a twenty-four hours journey from the British shores. Yet so far no one had denied its identity with the Asiatic cholera; no one had been mad enough to deem it endemic to the respective countries through which it had passed. No! It must come before the English sages, and some of them determined to support the good old proverb of “nothing’s being new under the sun,” declared it had raged in England a century and a half ago; that it was not contagious, not imported, &c. &c. Yes, strange to say, they would not acknowledge it contagious, though they might see three or four persons take it successively in the same family or house; though they saw a nurse attacked immediately after putting a corpse into the coffin, who had died of it; though they saw a woman attacked after washing the clothes of a cholera patient; though they heard of its breaking out in districts where it had never before been heard of, immediately on the arrival of a vessel from an infected port. No! So some determined that it must arise from a peculiar constitution of the atmosphere, though it had raged with equal violence in the scorching sun of India, and amongst the frosts and snows of Russia. Others proposed its arising from impure emanations from the earth, though it had been

the same, or nearly so, on the barren and parched sands of Egypt, and amongst the marshy jungles of Jessore, and had even raged on board vessels hundreds of miles from any land at all. I think I have said enough to convince you that (if I have not I could say more) a rational and disinterested person may believe the disease now prevalent in London is Asiatic and contagious cholera. But you have not scrupled to charge those who entertained a different opinion from your own with being alarmists, interested persons, &c. &c. This is very unfair, and calculated to do immense mischief to the profession (which you profess to shield) in the eyes of society in general; and the man must be very narrow-minded who is obliged to resort to such means to uphold his doctrine.

I am Sir,

Your obedient Servant,

A. P.

April 4th, 1832.

[Notwithstanding the charge of narrow-mindedness made against us by our correspondent, we will prove to him our magnanimity by inserting his letter, though in reply to our remarks published eight weeks since. We are quite satisfied that any opinion we ever advanced on the nature of the late epidemic, mis-named cholera, has been amply verified, and cannot be shaken by the mere gratuitous assertions in the above production. If the disease were contagious, what exempted medical men, or the old women of the faculty, who believed it so, from its attack? Did Mr. Searle, Dr. Johnson, or a single speaker at our medical societies, who had seen the Indian disease, pronounce it, or the late epidemic, contagious? Will our correspondent favour us with the names of the contagionists, stating their relative position to the Central and other Boards of Health, so that we may place them on record, and in juxta-position with those of their opponents in this country and in France. Our valorous

opponent must have been very inattentive to the state of the weather and the seasons for the last four years, when he says it was genial; and, lastly, we ask him, what has prevented the disease from devastating the kingdom, as his prognosticating friends, the contagionists, had so ominously predicted?—Eds.]

MEDICAL PRACTITIONERS.—CAUTION
TO THE UNSKILFUL.

ANOTHER of those fatal cases which so often happen from the employment of ignorant and unskilful practitioners in the medical profession, occurred in Stockport, 31st ult. We are tempted to give a brief outline of the case, in order the better to put the more ignorant of our fellow-beings on their guard against giving the least encouragement to those who either have not served a regular apprenticeship to the profession, or are otherwise unable to produce certificates of their having been admitted members of any medical or surgical institution. In this instance the young man, charged by the verdict of a coroner's jury with the offence of *manslaughter*, had not the slightest qualification, and, having attempted to put his abilities to the test in a simple case of child-birth, he appears to have exhibited such a lamentable share of ignorance in his knowledge of even the first principles of midwifery, that had not the able assistance of Mr. John Rayner been happily called in, the mother as well as the child must, of a certainty, have fallen a victim to the inordinate itching of this veriest of medical impostors. To give particulars of the proceedings as they transpired before Mr. Hollins and a most respectable jury, would in no way be pleasant to ourselves, or interesting to our readers, the details being of a nature too indelicate for the public eye. Sufficient, therefore, for our part be it, that Joseph Senior, a young man, who practised as a

tooth-drawer in Brinksway, undertook the office of accoucheur to Alice Hewitt, the wife of a labouring man in the Higher Hillgate; and having, from ignorance or inattention, neglected, during the time he was with her, to render her timely assistance, the infant died from the improper treatment of the operator. But what renders the case still more melancholy, every thing, according to Senior's opinion, had been going on so well, for about twelve hours, when, all of a sudden, he inquired for an iron skewer, and with it, or some other sharp instrument, according to the opinion of several of the medical profession who have examined the infant, the head appears to have been punctured. It was also stated by the witnesses, that though Senior had told them the infant had been dead for two hours, yet, on its being born, there was motion in the limbs, and respiration in the throat; and that the delivery was ultimately effected by violence, being determined, as he said, of going through the operation himself, as he had made a fruitless effort in getting any one to assist him in the extremity, notwithstanding he had been to several surgeries in the town for that purpose. The opinions of three medical gentlemen went to show that the treatment of Senior was of the most improper and criminal kind, and that violence in the operation was totally unnecessary. The enquiry lasted upwards of twelve hours, and the jury, after a patient investigation, came to the unanimous verdict, "That the prisoner on the 24th March, with a certain sharp instrument penetrated the crown of the head of a new-born male child, thereby inflicting a wound of the length of two inches, and the breadth of one, by which it immediately died." The prisoner was then committed under the coroner's warrant to take his trial at the assizes. It is really astonishing, that in a country like Great Britain such fellows as this are not restrained from practising medicine.

STRICTURES ON THE EXAMINATION AT
THE ROYAL COLLEGE OF SURGEONS.

*To the Editors of The London Medical and
Surgical Journal.*

GENTLEMEN,

IMPRESSED with every respect for the judgment and ability which generally characterize your spirited Journal, I must declare, that I am not a little surprised at your giving insertion to a communication so jejune, unconnected, and altogether unmeaning, as that bearing the signature of C. D. M. in your last. I can scarcely forbear thinking, that you were actuated by more than ordinarily benevolent feelings, in fostering thus readily, the "cacoethes scribendi" of the newly bedubbed knight of your order; or that, in the spirit of curative speculation, you deemed it possible that, the mere holding up to his delighted gaze, the peculiar brilliancy of his effusions through the medium of your reflective pages, might impress him with the extent of his temerity, and, like a burnt child, induce him in future to shun the fire.

Your correspondent on the outset, professes himself "a friend of the medical pupil, and a warm and sincere supporter of those rights, which are justly his;" leaving us to infer, that he is about to complain of some grievance endured, or some right infringed; whereas, nothing of the sort is to be found in the sequel, and hence his elegant assertion of championship is perfectly extraneous, or mere twaddle. He next proceeds to inform us of his examination at the College of Surgeons, and ungratefully ventures to censure the good nature of those examiners who gave him his diploma; for what can be a greater censure, than the selection of questions, which it appears, composed a *part* of that fiery ordeal, through which he so manfully passed: Then, by way of shewing his friendship to the medical pupil, he begs him "not to be disheartened or dispirited at the difficulties of his examination," see-

ing by his catechetical series, what an easy battle he has to wage; but, with singular consistency, adds, as if suddenly inspired with super-human wisdom, that if he do but attain a sound knowledge of anatomy, surgery, physiology, &c. "he need have no fears on the subject."

I am induced to make these observations, gentlemen, not from any desire to obtrude myself upon public notice, nor from any impression of injury C. D. M.'s lucubrations are calculated to have upon those to whom they are principally addressed, namely, the medical pupils; but simply to express my own, and the general repugnances of that body, to all unwarranted assumptions of dictatorialship, and our confidence with competency of those eminent professors, who are the constituted teachers and advisers in all matters touching our profession—

Requesting the insertion of those sentiments,

I am, Gentlemen,

Your humble servant
and constant reader,

J. C. G.—Y.

St. Bartholomew's Hospital.

Ioduret of Zinc.—Dr. Davidson gives the following formula for this preparation:—

Iodine	.....	100 grs.
Zinc	.....	26 grs.
Distilled water		120 grs.

The zinc should be in very fine fragments. Considerable action soon takes place, after the mixture is made, and the fluid becomes of a deep brown colour. The phial should be frequently shaken, and kept at a certain distance from the fire. The solution is accomplished in four or five days, when it is quite colourless. Its external application has been found useful in leprous affections. It appears to act as an escharotic, and requires to be repeated more than once,
—*Glasgow Medical Journal.*

THE

London Medical & Surgical Journal.

April 21, 1832.

MR. GREEN AND HIS LECTURES
AGAIN.

IN another part of this Number will be found a letter signed "One of Mr. Green's Pupils," in defence of Mr. Green, which betrays an obliquity of intellect seldom equalled in the annals of modern journalism. A lammer or more silly defence could not have been offered. Had we not a particular reason for taking special notice of this letter, which prudence forbids us to disclose, we should have inserted it without a single comment, as we are perfectly content to leave the question between ourselves and Mr. Green to the judgment of the profession. The writer of this impudent epistle has had the audacity to question our love of truth and justice, and to accuse us of *robbery*, by publishing Mr. Green's lectures without his consent. Mr. Green had the rashness to make the same accusation, and to him we replied in these words, which we now apply to his insolent defender:—

"Dishonesty! forsooth. We fling back the imputation in the teeth of our rash accuser; and if we do not add 'with contempt,' it is only because the phrase falls far short of conveying the disdain which we feel on this occasion. Dishonesty, indeed! and the foul and infamous charge to come from such a quarter, too! We tell Mr. Green that, at all events, we would venture to compete with *him* as to our respective claims to integrity of character, and to fair

and honourable dealing; provided only that he will consent to call some of the surgeons of Guy's Hospital to give evidence on the trial."

The writer accuses us of having misreported the lectures of Mr. Green, *which is false*, as we offered Mr. Green to submit our manuscript of his lectures to his perusal, previously to sending it to the press, which he declined, or to insert any errata he thought proper, at the same time cautioning him to beware how he accused our reporter of incompetency, without just cause. He, for the best reason imaginable, declined to transmit errata, simply because he could find none. We challenge Mr. Green to deny this statement. Yet Mr. Green's dear friend tells us "he did not choose to father all the errors and blunders that our Journal puts in his mouth, &c." He goes on to say, "You, who disregarding the claims of justice and honesty, persisted in a most unjustifiable invasion of author's rights, and forgetting what was due from one man of honour and a gentleman, have by surreptitious means availed yourself of the learning and talent of a member of your own profession, in open opposition to his express desire, for the purpose of advancing your own interests. Surely you cannot seriously doubt the existence of the rights Mr. Green claims, &c." To all this we reply, Mr. Green has no more rights than any other public lecturer; his lectures are public property, and *we shall use them as such whenever we please*. We, therefore, retort upon the writer his

own query, "by what obliquity of reason is it that you overlooked it?"

Our chivalrous opponent informs us that the public and ourselves must know and feel that our conduct in publishing the lectures in question, "to be one of unqualified injustice and robbery." Now it will be remembered that we published selections or extracts from Mr. Green's lectures, and not the whole, and that we had an *established right to do so*; if this be injustice or robbery, the laws of our common country are alone responsible. But we assure our insolent opponent, that we are not in the habit of robbing either professors or museums, or of vainly attempting to defraud any man of honour, and a gentleman to boot, from Sir A. Cooper down to Mr. Green of King's College, of either the fruits of his learning, or his talents, or his industry. "I doubt not, after all," quoth our correspondent, "you will continue to punish Mr. Green with a sentence of eternal oblivion, as one of those who *are* jealous of that publicity, you can give his lectures in your Journal, and to imitate that very wise and prudent forbearance you have latterly observed in regard to that gentleman and his lectures." That remains to be seen. The writer proceeds to state, that the public will not be deceived by the pretended reason we offer for declining to publish selections from the lectures in question, as the real cause is our dread of encountering Mr. Green in the Court of Chancery. We are of opinion, however, that the public do not care "a lock

of goat's wool" whether the said lectures are published or not, and we inform our opponent that we and Mr. Green may meet again, for we wish to give him an opportunity of applying to the High Court of Chancery in defence of his supposed rights, and as a legitimate mode of puffing both him and ourselves. He is of course, in our opinion, an exception to those who express a hypocritical jealousy at the publication of his lectures; and he has shewn so much wisdom and prudence in his honourable warfare with us, that we are resolved to encounter him at Philippi. But the fact is, our table groans with the weight of lectures at present; and while we can supply those of such distinguished Professors as Dupuytren, Guthrie, and fifty others, we can well spare our regrets at the absence of the surgical lectures of King's College. We clearly see through the design of this letter, and if we had not a feeling of pride and honour, infinitely more acute than the writer of it, we should place his name before the public:

Let Mr. Green and his friend beware of the public press, for as to stopping its majestic course, it is an achievement which was certainly never destined to grace his biography. Let him remember what a "damned defeat" he has sustained, and let him not imagine that he is such an oracle—

"As who would say I am Sir Oracle,
And when I ope my lips, let no dog bark."

We are sincerely grieved, that
"a man of honour and a gentle-

man, and a member of our profession," should be so fool-hardy as to defend an opinion in open opposition to the general voice of the medical public; and go in search of adventures like the knight of the rueful countenance. If Mr. Green was sincere in his opposition, why did he not commence his Chancery proceedings while we published his lectures? Why did his solicitors interfere "so late in the affair," after we had announced our determination to insert no more of his orations? Was it for the purpose of exciting us to do so? Is Mr. Green sorry that his lectures are not placed by those of Baron Dupuytren and Mr. Guthrie? In a word, what object has he in view, in now daring us to resume their publication? As we have discontinued the publication, we cannot be guilty of either injustice or robbery; and we demand, in the face of the profession, what is Mr. Green's real object, or what is that of his friend in writing this strange letter?

Here we leave him to his reflections. "We envy him not; but we will hope that our remarks may convey a lesson of moral instruction to him, which he will do well never to forget." He has placed himself in a truly unenviable situation; and events have clearly shewn, that his rash conduct was at least bad policy. This opposition to the publication of public lectures, has too long prevailed among monopolists and their advocates. It is an old fashioned attempt to justify a narrow minded abuse, and might have succeeded in

the last century, but is too much antiquated for the good sense and taste of the profession at the present period. Happily the sense of the faculty is opposed to the conclusion of our candid correspondent, who, Gotha he is, will discover that his friend must yield to the streams of opinion, which he cannot stem. His tone is prejudiced and partial, and his mind is so strangely constituted, that he cannot perceive the honour, the service, the positive advantage, we should confer upon Mr. Green, by publishing his lectures. If proof were demanded of us in support of this position, we need only refer to the manly and candid declaration of Dr. Elliotson, in his introductory lecture delivered in October last, that his practice doubled and trebled in consequence of the publication of his lectures. What pure affectation is it on the part of this writer to insinuate, that Mr. Green would not be benefited by a similar proceeding? Is he so very extensively engaged in practice, that he should object to having it doubled or trebled? We leave his defender to answer this question. Lastly, we beg to inquire, how was it that Mr. Green never objected to the publication of his lectures in conjunction with Sir Astley Cooper's, in 1824, and what has induced him to change his opinion in 1832? Perhaps it is his removal from the Borough Hospital School, where he had made himself so famous, to King's College. In conclusion, we observe, that if our correspondent should favour us with another communication, we

call upon him in the first place, to answer the above questions, before he commences any new calumnious matter, or otherwise we must decline a controversy with him.

The Dublin Journal of Medical and Chemical Science; exhibiting a comprehensive View of the latest discoveries in Medicine, Surgery, Chemistry, and the Collateral Sciences. No. 1. March, 1832.—Hodges and Smith.

It has long been a matter of surprise with the faculty in all countries, that Dublin had not a medical periodical; more especially since the publication of the admirable Hospital Reports and Medical Transactions of that city, than which none more valuable had emanated from the press in any country. When we consider the high scientific attainments of the profession in Dublin, evinced in the works already alluded to, and in many original productions, we have lamented the want of a Journal in that city, and we now hail the appearance of our contemporary with much satisfaction. Such a work was a great desideratum, and, conducted with the spirit displayed in this number, cannot fail of success. On former occasions attempts were made to establish a work of this kind, but these were fruitless, in consequence of the baneful effects of political feeling, which set bookseller against bookseller, medical man against his brother, and produced the greatest mischief in every social relation. The first step towards the removal of these evils has been accomplished, and a reformed Parliament will speedily effect the rest. In our days at *alma mater* it was useless for a publisher of a particular political party to bring out a work, for the trade in general would not subscribe for it, and, consequently, the production was sure to fail. How different is business car-

ried on in London, where religious or political feeling has no influence whatever on the success of a publication. Every member of the book trade will subscribe for a work, as a matter of business and profit. We throw out these hints for the consideration of the Dublin publishers, and we must maintain the sooner they are carried into effect the better. We trust that the day has gone by when politics could estrange the faculty from supporting a national work, such as that now under consideration; and we know, from our personal knowledge, that the profession in Dublin and throughout Ireland, if unanimous in the intention of contributing to this undertaking, could produce one of the most able and instructive periodicals in existence. They have the examples of London, Edinburgh, Glasgow, Worcester, France, and America before them; and why they have not imitated them, it is not easy to determine. We find scions of the Irish faculty contributors to the London and Edinburgh Journals, and we ask them, why not patronize a Journal of their own? It is a curious fact, that until lately few of our Irish contemporaries have been original authors, with the exceptions of Rutty, Macbride, and Dease—though these few have produced able works. We need scarcely remind our readers of the productions of Harrison, on the Arteries, the Dublin Dissector; the translation of the Pharmacopœia, by Barker and Montgomery; the Supplement to the same, by Spillan; Andral's Pathology, by Townsend and West; Stokes, on Diseases of the Chest; Flood, on the Brain; Porter, on the Surgical Pathology of the Larynx and Trachæ; Kirby, on Hæmorrhoidal Excrescence; Colles's Surgical Anatomy; Stoker, on Fever, Dropsy; Mills, on Fever, Hydrocephalus, &c.; with the various Fever Hospital Reports by Cheyne, Percival, Cramp-ton, Marsh, O'Brien, &c. &c.

Mr. Hart takes the lead, and his paper is entitled, *On Partial Frac-*

ture of the Long Bones in Children, which we have considered so valuable that we have extracted it, and it will be found in another part of this Journal. The next essay is by Mr. Scanlan, *On the Effects of Prussic Acid on the Tipula or Crane-fly*. It appears from his experiments, to assist, in some measure, the parturient action in the female. Dr. Corrigan follows, *On the Treatment of Recent Catarrh*, concerning which disease he entertains several original opinions. He considers that there are two species of catarrh, very similar in their semeiology, but altogether different in their pathology, and requiring very different treatment. In the first we have simply an affection of the larynx and trachea; but in the second form we have the bronchia affected, and the malady assumes the form of bronchitis. The respiration in the first is natural, the other is characterized by distinct wheezing, as heard by the stethoscope. In the former the exhibition of a stimulant, such as warm punch at night, with camphor mixture and tincture opii, are generally sufficient to remove the disease; the other must be treated as bronchitis. We are next indulged with a communication from the learned editor, Robert J. Kane Esq., M.R.I.A., Professor of Chemistry to the Dublin Apothecaries' Company, &c. *On the Composition of the Urine and Blood in Diabetes Mellitus*, and it would seem from his experiments, which appear to have been conducted with great skill, that there is the natural quantity of urine present; while, on the other hand, the professor was not able to detect any saccharine matter in the blood. Mr. Porter then details some interesting cases of *Aneurism*, which are succeeded by Dr. Graves' *Observations on Secretion, and the Ultimate Structure of Glands*. This is a highly interesting paper, and will be read with advantage by every one. We may return to it hereafter. The next article is entitled *Isomerism*, translated from the French of Professor

Dumas; and this is succeeded by an able paper from the pen of Professor Graves, entitled *Observations on Secretion, and the Intimate Structure of Glands*. The last original communication is headed, *Observations on the Preparation of Soap Cerate*, by Mr. Ferguson. We shall notice these articles as early as possible, and in the mean time wish our contemporary every success.

London Medical Society.

Monday, April 16th, 1832.

DR. WALSHMAN, V.P. in the Chair.

THE Minutes of the last meeting were read, and confirmed.

Mr. Shearly detailed some cases of cholera, which had fallen under his care, since the last meeting; and two of which had proved fatal in a few hours. The wife and husband had previously been in good health, but resided in a house exposed to putrid animal effluvia. He left it to the Society to decide whether the disease was or was not contagious.

Dr. Johnson inquired whether the first person affected had contracted the disease by contagion, for if this could not be proved there was an end to the idea of contagion in this family. It would be recollected that this family were exposed to the same local causes and epidemic influence.

Dr. Ryan requested to be informed of the habits, diet, and condition of this family.

Mr. Shearly replied that the disease could not be traced to a contagious origin; that the family lived well, and were in comfortable circumstances.

Dr. Whiting said, that he had used every effort in his power to investigate the nature of cholera, and having seen much of the disease in the Borough, he had arrived at a conclusion very different from that of the profession, and that is, that the disease was contagious. He was of opinion

that diarrhœa (diarrhœa with sickness and spasms) was cholera, and that all persons so affected could communicate the disease. It was asked how did cholera get to Paris? He could readily explain, by persons affected with diarrhœa who had gone from this country to Paris communicating the disease. In this way could the disease be satisfactorily explained. He was convinced that the disease was generally prevalent, and that the profession had done great mischief by reporting the worst forms of the disease only. It was right to disabuse the public mind on this point; and he was sure that if it was generally known it was a mild disease in its early stage, so much alarm would not exist.

Mr. Salmon could by no means agree to the conclusions of his friend Dr. Whiting, which appeared to him to be totally untenable. From all he had read and heard of cholera it differed in every particular from a contagious disease. He remarked that the disease was chiefly confined to the Surrey side of the river (Thames), and though there was incessant intercourse between the people of that side and this, the disease had scarcely appeared here. He was connected with one of the largest dispensaries in London, the applicants generally resided in unhealthy districts, but there was no cholera amongst them. Dr. W. had alluded to Paris, but his arguments were quite inconclusive. Every one knew, that the Parisians, rich and poor, drank from a pint to a quart of sour wine daily, that until lately there were no common or public sewers; and besides there was no proof adduced that cholera had been imported there by contagion. Mr. S. replied, with great ability, to every one of Dr. Whiting's positions, and in our opinion completely refuted them.

Mr. Dendy had always heard Dr. Whiting with great pleasure, but he should say, with due deference, he had not offered a single proof of the contagiousness of cholera. Dr. W.

had admitted that the disease had, in the first instance, originated from local causes; and if so, why, in the name of heaven, should it not do so at present. He had seen ten or twelve cases of the disease, and was decidedly of opinion that it was not contagious. Mr. Dendy continued his arguments with that pure logical force which characterises every thing he advances, and repeated that Dr. W. had not adduced a single fact in proof of his opinion.

Dr. Johnson observed, that he had heard Dr. Whiting with much attention and pleasure, and certainly his arguments were ingenious, but in his opinion by no means tenable. Though he argued that diarrhœa was a premonitory stage of cholera, he could not admit that it was contagious. If the malady were contagious, the medical men must communicate it in every direction. He, and many others, had visited cholera patients; he passed the finger into the mouth, had felt the pulse, and examined the skin; had gone from patient to patient, and proceeded in this way without manual ablution, had returned to his family; had dined with them without changing his dress, or using maniluvia, and yet did not communicate the disease. If Dr. Whiting's opinion prevailed, the Privy Council should issue an order against the practice of physic, as the medical men must be the chief sources of contagion.

Mr. Headland remarked, that he had heard Dr. Whiting's observations with attention, but must state, that to him they appeared most inconclusive. The disease called cholera resembled none of the contagious maladies. If the disease were contagious it would not be confined to any particular district; and had an equal number of persons been exposed to small-pox, measles, scarlatina, or psora, much more would be affected than in cholera. Mr. H. gave numerous illustrations in support of his opinions, all which evinced that close reasoning which always distinguishes his observations.

Dr. Stewart observed, that great stress had been placed by the contagionists upon a single instance in which cholera appeared to have been communicated by contagion. Now, upon equal grounds, the non-contagionists should be allowed the like advantage in a case that had arisen sporadically, and he therefore wished to ask Dr. Whiting, whether he admitted that the present disease had arisen in any place in which no trace of contagion could be found. He also stated, that no case of cholera had occurred at the Bloomsbury or Northern Dispensary.

Dr. Whiting replied in the negative.

Mr. Field called on Mr. Dendy to state, whether a case he had narrated at the last meeting had not originated from moral causes?

Mr. Dendy replied in the affirmative.

Mr. Drysdale then related a case which had occurred at No. 5, Waterloo Place, Newington, in which no trace of contagion existed, and in which no other person was affected. He and his assistant only had attended.

Dr. Whiting observed, that Mr. Wagstaff had informed him, a fellow-labourer who attended deceased had taken the disease; but it appeared that there was a doubt whether Dr. W. alluded to Mr. Drysdale's patient.

Dr. Blicke called on Dr. Whiting to explain the fact of cholera appearing in an army in India and disappearing so soon as the general ordered a retrograde march.—Adjourned.

Westminster Medical Society.

April 14th.

DR. LEONARD STEWART in the Chair.

MR. MARSHALL proposed that the Society offer a prize for the best essay on cholera. He said that he would himself give five guineas if the Society would add fifteen.

The President observed that such a proposition should be first submitted to the Committee.

Dr. Gregory remarked, that Dr. Johnson had stated in some one of the papers, some time ago, that he thought the variations of temperature would prevent the spread of cholera in this country. He inquired if Dr. J. had had reason to change his opinion?

Dr. Johnson wished Dr. Gregory had not trusted to his memory, but had stated facts. He had said, that if the disease arrived in this country, from the variations of temperature, nature of the climate, the constitution of the people, their habits, manners, &c. it would be either divested of its violence, or not spread to the extent it had done in other countries. He had said this seven months ago, and he appealed to the experience of all present, whether his assertion had not been verified?

Dr. Gregory thought the warmth in Dr. Johnson's reply was quite unnecessary. He was merely desirous of learning whether Dr. J. had had reason to modify or alter any of his opinions; as he had not, he should take an early opportunity to compare them.

Dr. Granville thought there was nothing more amusing than the manner in which *Mister Inspector Gregory* had commenced the discussion. He thought at first, that he was going either to disprove or confirm a statement of Dr. Johnson's; but now he informed the Society, that he intended to look back to, and compare them. He had never heard any opinions, given in anticipation, so fully borne out as those of Dr. Johnson.

Mr. Greenwood had observed that the non-contagionists were extremely anxious to get rid of the discussion. A number of facts had occurred in this country so convincing, that he thought they would shake even Dr. Johnson's opinion. Dr. J. had stated in this Society, that the cholera in Guy's had a local origin: he went to see it, and he could trace every case to contagion. The steward had in-

formed him that a man of the name of Owen Maly, had been found wandering about inside the gate of the hospital, and had been taken in soon after he was attacked by the disease, sent to the Petersham or Chelsea Ward, where he died: the matron of the ward confirmed this statement. Charlotte Shérlock, a nurse attending on cholera patients, was taken ill; but is now convalescent. In Cornelius's Ward a nurse had died; her name was either Anne or Elizabeth Powell: she was a night nurse, on board wages, and allowed to go out in the day, and this woman was taken suddenly with vomiting and purging on her return from one of her peregrinations. The nurse who succeeded her, slept in her bed ten days after, was seized, but recovered. A night nurse of Lazarus's Ward, after a visit to the infected parish of Bermondsey for a week, was taken ill, and died. He asked if any rational man could deny that these women caught the disease in the cholera districts? He then alluded to the disease in Paris, and said that the opinion of the Faculty was changing, and that they now thought it an epidemic propagated by the laws of contagion. He was of opinion that its want of fatality in London was owing to the *excellent regulation of the Board of Health*, more especially in regard to the instant sequestration of the sick in hospitals.

Dr. Granville inquired who attended the patients during the day, while the night nurses were getting drunk, previous to their catching the disease?

Mr. Greenwood said, that Dr. Granville knew how to manage a debate very well; he could manage to find out a flaw in anything. He had thought it sufficient to attend to the general bearings of the case; and it is impossible to obtain all the minute particulars.

Mr. Chinnock would rather depend on the statements of Drs. Johnson and Bright, than on that of the steward or matrons.

Mr. Greenwood had only obtained facts from the nurses, not their opinions.

Dr. Gilkrest had inquired of the medical men of St. Thomas's and Guy's, and they had never been able to trace contagion. The first person affected in Guy's was a nurse, who had not been out of the hospital. A document similar to that which had issued from the Hotel-Dieu, had been put forth by the physicians and surgeons of the Hospice St. Louis, and they stated the reason why it had not appeared previously was, because they had not had cases sufficient.

Mr. G. Burnett inquired if any of the medical officers of St. Giles's were present, otherwise he would narrate some cases which he had witnessed.

Dr. Gregory had seen all the cases in St. Giles's, and would be able to act as a check on Mr. Burnett.

Mr. Burnett then alluded to the cases of two nurses in the hospital. They were taken as nurses when in perfect health; they were not allowed to go out, but received double pay. One was taken ill, and died; another was seized at half-past four yesterday morning, and died at half-past three in the afternoon. They were quite healthy previous to this attack of the disease, which they took while attending on patients. Whether they caught it from them or not, he left to be decided by the Society. These facts were learnt by Mr. B. in the hospital. He thought that if we could trace the disease from a patient to a healthy individual, it would establish the point he was contending for.

Dr. Gregory observed that three nurses were attacked; the first recovered, the second died yesterday, and the third is still very ill.

Mr. King inquired if the learned professor approved of quarantine regulations, as he had said that cholera could only be caught by healthy persons going into infected districts?

Dr. Blicke inquired how the double

pay of the nurses was expended? He was also desirous of learning the treatment.

Mr. Burnett said that they were prevented from committing excesses. He did not like to detail the treatment, as he did not bring them forward to illustrate the treatment, but the doctrine of contagion.

Dr. Blicke thought that the nurses were very liable to excess, in spite of the attention of their superiors, not in drinking, but in eating, which he thought more injurious. There was an argument advanced by Mr. Burnett, with which he fully agreed. He had said "if," mark, "*IF we could trace the disease from a patient to a healthy individual, it would establish the point he was contending for.*" Doubtless *if* it could be proved, then we should all agree; but Dr. B. believed that it could not be proved. He had been with the army in India; it was perfectly healthy, and being marched seven or eight miles, the cholera appeared amongst them, and by the time seven or eight more miles were passed, they began to die. The order for counter-march was given, and they returned with all their sick; these died, but no more cases occurred. They again took the same road, and again the disease shewed itself. It was finally avoided by a circuitous route. Such facts as these must be disproved ere the doctrine of contagion was established. If the clothes of a small-pox patient are carried to a hundred children unprotected, ninety-nine out of a hundred will get the disease. Is it so with the cholera?

Dr. Webster did not think the cases adduced by Mr. Burnett proved contagion, as the individuals were all in the same neighbourhood, and consequently exposed to the causes which produced the disease in the patients which were taken to the hospital.

Dr. Gregory thought that the non-contagionists were very hard to convince. If poor, squalid persons were brought forward as proofs of the disease, it was starvation; if people who

had been enjoying the good things of this life, they had fed to excess.

Mr. Hunt had heard medical men praised for their courage and self-devotion in venturing to treat this disease. He was asked if one half the profession had not fallen victims to it? He was asked for their names, and the names of those who came from France to see this contagious disease, and had never returned to their own country. He believed that the contagionists had hitherto kept this mass of evidence to themselves; and he hoped they would be induced to bring it forward, or they would not do their duty.

Mr. Greenwood rose to answer, but such confusion, noise, cries of various kinds, and we might almost say cat-calls, were put in action; one person in particular, who sat near us, making so tremendous a noise, that Mr. G. was obliged to sit down without having been heard. We are non-contagionists to the back-bone, and therefore our motives cannot be misinterpreted in what we are about to say. Mr. Chinnock observed, that according to the rules of the Society, no one should speak more than twice; but we would ask, is it fair, when the non-contagionists are 29 in 30, to insist on such a rule, when it is evident that by it the contagionists will scarcely be able to address one to every ten speeches of their opponents? How can they answer the remarks and innuendoes continually thrown out against them, if they are not allowed an opportunity to reply? We must repeat, the conduct of the Society was, on this occasion, by no means creditable.

Dr. Whyte supported Dr. Blicke in his statement relative to the army in India. There were two regiments on the road, one of which suffered severely from cholera, while the other escaped by choosing different camping stations from those of the first regiment.

Dr. Ferguson observed that the mortality was increased in the districts where the cholera was.

Mr. Hunt observed that if the disease were pestilential, the average mortality should be increased.

Mr. Marshall inquired if Mr. Greenwood had taken pains to trace the progress of the nurses to Bermondsey, and to learn whether they had been in those parts of the parish where the cholera was? Mr. M. did not believe that there was such a thing as contagion in any disease. He then displayed at great length, and in a most eloquent manner, the horrible effects which a belief in contagion was capable of producing, and urged the Society to pause ere it subscribed to such a doctrine.

[We refrain only from giving his remarks, because it is impossible to transfer to paper the eloquent and impressive manner of the orator; his pious and beautiful discourse must have carried immediate conviction. While alluding to the beneficence of the Creator, he perceived one of his audience smiling, and immediately indignantly asked, Am I laughed at for this allusion? The whole Society assured him to the contrary, and earnestly entreated he would continue.]

He then gave the autopsies found on examining a man on board the *Dover*.

Mr. King then made some remarks on the pathology and treatment of the disease, during the continuance of which the members rapidly retired, so that when the time at length arrived for Mr. Burnett to answer his querist, but few remained. In consequence Mr. B., after complaining that he had been asked several questions, and no opportunity afforded him to reply until too late in the evening, declined saying any thing further.

[The Society meet for the last time this session, this day (April 14th) fortnight.]

DEFENCE OF PROFESSOR GREEN'S WAR WITH THE PRESS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

IN venturing to take up the cudgels on behalf of Mr. Green, in reply to an article which appeared in the last number of your Journal, on the subject of the publication by you of Lectures delivered by Mr. Green, I feel by no means confident that this appeal to your justice will be productive of any useful result; judging of you by the article in question, I fear the case would be hopeless; but as I am well aware men, under pressure of circumstances, are apt to be guilty of things which were they unconstrained they would entirely shrink from, I am willing for once to risk the trouble, the putting together of this reply will cost me, and to try what sort of stuff your mind is really made of. If a love of truth and justice be any part of your character, you will publish this letter in your next number; if not, you will suppress it, and you will in that case drive me to seek for redress for Mr. Green in some publication under the direction of gentlemen who have some more consistent notions of what you are pleased to call "the majestic course of a free press."

If there is any meaning at all in your observations about Mr. Green, if any definite understanding is to be gathered from the eight and half columns of words which compose them, I believe it will be found to be a complaint on your part, that Mr. Green is desirous to suppress any unauthorized publication in your Journal of notes surreptitiously taken of lectures delivered by him at King's College, London; and that in pursuance of such desire, he, after you had ceased for some time to carry on such publication, through his solicitors, caused you to be informed that any future publication on your part of notes of

his lectures would be followed by an application to the Court of Chancery for an injunction to restrain you from such unauthorized proceeding. This conduct on the part of Mr. Green you call "strangeness and waywardness of temper;" a memorable lesson of moral instruction, such as it may be useful for the rising generation to contemplate. So because Mr. Green does not choose to allow his property to be invaded in silence, because he does not choose to father all the errors and blunders that your Journal puts in his mouth, his temper is strange and wayward; and because he desires you to abstain from such a course, and from injuring his reputation by such means, his conduct is said to present a memorable lesson of moral instruction! Really this is a great discovery on your part. The world in general, unless enlightened by you, would be apt to reverse the charge, and to imagine that the wayward temper was yours, and the moral lesson (if any) afforded by you, who, disregarding the claims of justice and honesty, persisted in a most unjustifiable invasion of another's rights, and forgetting what was due from a man of honour and a gentleman, have, by surreptitious means, availed yourself of the learning and talent of a member of your own profession, in open opposition to his express desire, for the purpose of advancing your own interests.

Surely you cannot seriously doubt the existence of the rights Mr. Green claims, or if you did, you could not but feel he had good and substantial cause of complaint against you, nor could you doubt what conduct a gentleman in such a case ought to pursue. By what obliquity of reason is it then that you overlooked it? And giving you credit for these correct feelings, what has induced you to indulge in that strain of Bobadil swaggering, which is the grand characteristic of the article in question? Did you hope by such means to deter Mr. Green from seeking protection against your most unjustifiable invasion of his

property, or could you so far deceive yourself as for one moment to suppose the public could be misled in their judgment by the loud and confident boasting of your own acuteness, or your vehement reiterations of your full resolve to persist in a course which they and you must know and feel to be one of unqualified injustice and robbery.

Reflect a little, and then determine how far your interests or your character can be served by a course of conduct like this. I hope better things of you, and trust yet to live to see you retract every word of that vain and idle boasting, the more vain and the more idle because, I doubt not, after all you will continue "to punish Mr. Green with a sentence of eternal oblivion, as one of those who are jealous of that publicity," you can give his lectures in your Journal, and to imitate that very wise and prudent forbearance you have latterly observed in regard to that gentleman and his lectures.

This forbearance you would have us believe arises from a kind consideration of Mr. Green's prejudices against a publication of his lectures in your Journal; but be not deceived, the public will, beyond all doubt, put it down to its correct motive—a fear of the consequences, and laugh at your impudent assumption of dignified moderation toward Mr. Green. It would, therefore, have been but prudent on your part, and certainly far more honest, to have avowed this legitimate fear, rather than have endeavoured to hide it under an arrogant assumption of your own importance as public journalists. For however much you may appear to imagine that Mr. Green desires his lectures to be published by you, because the letter of his solicitors was, it must be confessed, addressed to you rather late in the affair, the public will not be taken in by such appearance, nor can I believe that you will persist yourself to be deceived by them. You must know and feel that not only Mr. Green, but every other lecturer, is

very little solicitous of that *honor* which, by way of "punishment" for a "hypocritical jealousy" of publication, you propose to withhold, and in this view of the case I may be allowed to wonder how you ventured to issue a threat so utterly impotent of injury to all and every person but yourself.

Here I leave you to your reflections; I envy them not, but I will hope my letter may carry a lesson of moral instruction to you, which you will do well never to forget.

I am your obedient servant,

ONE OF MR. GREEN'S PUPILS.

King's College, 11th April, 1832.

[We insert this precious document, and offer a few editorial, comments upon it, which may, perhaps, cause Mr. Green to exclaim, "O, save me from my friends." He has to thank his indiscreet friend for our present remarks, which, perchance, may excite the ire of the latter somewhat more than our last. In justice to Mr. Green we insert this letter, as otherwise we should not enter into a dispute with an anonymous writer. —Eds.]

E. B. IN REPLY TO MR. WEST ON MUSCULAR CONTRACTION.

*To the Editors of the London Medical and
Surgical Journal.*

GENTLEMEN,

ABSENCE from home deprived me of an opportunity of seeing Mr. West's answer to my remarks until this day, or I should have replied to it in your succeeding number, knowing that a controversy is tedious in proportion to the length of the intervals separating its different parts.

Mr. W. first accuses me of *altogether* deprecating the promulgation of new theories, and then, quoting my own words, mentions the *class* of theories to which I objected. Whether Mr. West's theory belongs to this class, I leave him and the public to de-

termine. The truth of a theory is not "*mere* matter of opinion," but demonstrable in proportion to the degree and kind of evidence adduced in support of it. Sir C. Bell's theories on the functions of the nerves are not mere matters of opinion; neither is that affirming the existence of the gastric juice a mere matter of opinion. I am aware there are people who have doubts on these subjects; there are persons who doubt the contagious nature of the plague; nay, who even doubt their own existence; so that if every thing upon which doubts are entertained, is to be considered as a mere matter of opinion, then have we no matters of certainty, and consequently no solid basis for reasoning.

I did not, as Mr. W. asserts, pay your Journal the rather curious compliment of saying, "that its *chief* value will consist in checking the growth" of fanciful theories. I merely stated, that its probable operation, in that respect, was *one* of the *many* causes of the gratification with which I hailed its appearance. And surely to promote one of the main objects of the philosophy that immortalized the name of Bacon, can be no very unworthy employment for the periodical press.

I did not say, "that the governance of the nerves was a stimulating influence, without which muscles had no contractile power."

Mr. W. in this and other parts of his papers confounds volition with muscular contraction. On this subject I beg to refer him to my quotation from Sir C. Bell, also to Sir C. Bell's section on the "Nervous Circle," in his last work *On the Nerves*. In this section, Sir C. Bell shews that the nervous influence is not propagated from the extremities of the sentient nerves *towards* the brain, but *from* the brain to the extremities of the motor nerves. In the passage alluded to, the influence of the *brain* upon the *nerve* is called the governing or regulating influence, and that of the *nerve* upon the *muscle*, the *vis insita*. There is a manifest difference between governance and the power governed, a differ-

ence by no means confined to this subject. The governor of a state is not the power of the state, neither is the governor of a steam-engine the power of the engine, they are merely the regulators of the power; and if the powers of either were to act without the regulating influence of their respective governors, the state or engine would be in great danger of falling into "partial or general convulsions."

I did not say that the tonic contraction of the stiffened corpse was "merely the *stiffening* which all bodies undergo on cooling." I said, that the *tonic contraction* was merely that which all bodies undergo on cooling, using the adjective *tonic*, simply because it is that commonly employed, and now used by Mr. W. But it would, in my view, be as properly applied to the cooling of a piece of iron as to that of a human body. I should not have thought this distinction worth notice, excepting that although all bodies contract on cooling, and I believe, become stiffer by contraction, they may still be far from being stiff. Mr. Grainger's definition explains nothing. Mr. W. asks why the stiffening does not continue as long as the body remains cold, or until it is actually decomposed? and why it does not take place under all circumstances? I answer, that the stiffness does continue until the structure of the muscle becomes changed, which happens long before, in the common acceptance of the term, it is decomposed, as any one can testify who has had any experience in the dissecting room, or what is perhaps more agreeable, observed in the dining room the difference between a fresh killed leg of mutton and one that has hung a week or two. As to the second query, if Mr. W. will point out under what circumstances contraction does not happen to a cooling body, perhaps I may be able to explain the cause.

Mr. W. "does not deny that a paralysed muscle is always relaxed," "but says it is so because it is perma-

nently condemned to the restraining influence of the nerves."

That is, when the power that *prevents* a muscle from *contracting* is withdrawn, the muscle becomes permanently *relaxed*. Mr. W. refers me to an experiment of Dr. C. Henry's to shew that isolation from the brain does not deprive a nerve of its properties. Some of its properties undoubtedly remain; but as Sir C. Bell justly observes, we must distinguish between the vital properties of a nerve, and its property merely as a wet cord in conducting electric fluid. A nerve, when disconnected from the brain, may be made to obey certain stimuli, but the effect is to cause the muscles to which the nerve is supplied to contract. Even this property was destroyed by Dr. C. Henry by the application of narcotic poisons to the muscular extremities of the nerves, but the muscles remained relaxed.

I did not say, that although it should be demonstrated, and proved to my satisfaction, that Mr. W. "had hit upon the contrivance had recourse to by nature, I would not hesitate to say that she had made a clumsy piece of business of it." When we express our admiration of any of the works of nature, we are influenced by our perception of their beauty and symmetry, or the exact adaptation of their various parts to the end proposed. Upon these principles Mr. W. in his first paper indulges in expressions of admiration of what he believed to be the phenomena by which muscular contractility was effected. In my reply, I expressed an opposite opinion, viz.—that if nature had employed such a contrivance she would not have displayed her usual skill, inferring, of course, the improbability of her deviating in this particular instance from the perfection displayed in all her other works.

I believe all the points referred to in Mr. West's replication are now answered; were all his observations to be remarked upon, he might more justly complain of the length of this letter than of the last, which was little

more than half the length of that which it replied to, and barely the length of that containing the complaint. Mr. W. greatly undervalues my opinion of his importance. Had I really thought him an "insignificant reptile," I certainly should not have taken the *trouble* of writing what he terms, a *carelessly* severe and sarcastic letter in reply to him, neither should I have thought of crushing him *en passant*, but should have dismissed him as compassionately as my Uncle Toby did the overgrown fly.

E. B.

[Should Mr. West feel desirous to reply to this letter, we shall feel much pleasure in inserting his remarks, but with them this controversy must close, as we cannot continue to devote our pages to this discussion.—Eds.]

EULOGIUM ON MR. MORGAN'S LECTURES.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

BEFORE I read the last number of your valuable Journal, I was not aware that Mr. Morgan had any objection to the publication of the opinions he delivers in either his clinical or surgical lectures; and not questioning the veracity of your friends at Guy's Hospital, allow me to state, there are still many circumstances which influence me to be sceptical on this *point*.

Mr. Morgan lectures before a numerous class; the opinions he has formed, as the result of his experience, and the doctrine thereupon established, he intends to be their guide in practicing their profession. I think Mr. Morgan has sufficient confidence in *his abilities*, and so well assured of the *sterling merit* of his opinions, as to exhibit no puerile timidity at seeing those opinions in print. If, however, any peculiar cerebral development (a *le Gall et Spurzheim*) persuade him to think otherwise, he should consider that

his situation, in a great public institution, deprives him of the power to prevent the publication of his opinions so long as he delivers them.

The lectures of every public teacher appear to me to be the *pupil's property* (purchased, I am sorry to say in many instances, at too high a premium), and, consequently, he may dispose of them to answer a general good, or particular useful purpose. Acting on this principle, I enclose extracts from Mr. Morgan's lectures on ophthalmic surgery, which I hope he will recognise as genuine, as it is my object to do him every possible justice.

Moreover, the subject of the lecture demands particular attention, from the circumstance, that surgeons paid no attention to ophthalmic diseases till within the last very few years. The organ of vision (as if it constituted no part of the human body) and the diseases affecting it, were almost excluded from surgical enquiry, and they were, consequently, very little understood, if not altogether neglected. It is not, therefore, surprizing that "successive failures,"* and "a melancholy story of lost eyes," should be the result of unscientific practice, and remain the opprobrium chirurgicorum.

But the progress of science has, in a great degree, dissipated the mist which enveloped this department of the profession. I think it may be now admitted, that diseases affecting the organ of vision, differ little or nothing from those affecting other parts of the body, and that they may be successfully treated, according to the general principles of surgery.

But from the neglect of surgeons to this subject, it unfortunately happened there was room left for another grade in the profession (already too numerous.) Such neglect committed the treatment of these delicate structures to persons denominated occulists, who had not science for their

* See Mr. Guthrie's lecture in your last number.

guide, and whose practice consisted in empiricism and imposition. But from the great value justly laid on the sense of sight, even a promise of cure, which, I suppose, they are ready to hold forth, is generally purchased at any price; consequently it has been, and still continues, a lucrative business.

I think, therefore, that the cause of science and humanity demands, that all surgeons should endeavour to elucidate this subject, that lecturers on surgery, more especially those who have paid more than ordinary attention to ophthalmic diseases (such as Mr. Morgan) ought to cheerfully contribute their assistance to fill up this hiatus in the profession, which negligence first formed.

If they acted so, *oculism*, as a separate branch of the profession, would soon cease to exist; it would give up possession of the place it so long *illegally* occupied. Surgery would assume its legitimate and extended power; and, inasmuch, as diseases of the eye are induced by such causes as affect other parts, that they compose a part of, and sympathize, in health and disease, with the whole human body—it is reasonable to believe that their affections should yield to the same rational principles, which are generally applicable.

A PUPIL OF ST THOMAS'S.

Borough, April 7, 1832.

[The extracts alluded to in this letter will be found in the lectures, it being inconsistent with our arrangement to prefix this communication. Eds.]

Hospital Report.

WESTMINSTER HOSPITAL.

FISTULA IN ANO.

MR. GUTHRIE mentions, in his lectures on surgery, the case of a man, named Carpenter, who was admitted

with this unpleasant malady into the Westminster Hospital. He had been the round of nearly all the London Hospitals, had been cut in each, but without benefit. On examination, the fistula was found to extend very high up, so high that the finger could but just touch the opening into the gut, and the pulsation of an artery in the neighbourhood could be distinguished. These circumstances forbade operation by the knife, and Mr. Guthrie had a silver pliable tube made, which he passed up the fistula into the gut; a bit of lead wire was drawn through with great difficulty into the rectum, and then brought down on the inside of the gut. The tube being then removed, the wire was twisted tight, which gave, of course, some pain, strangulating the part of the gut included within the ligature. This caused inflammation and ulceration, and the wire gradually loosened and came away, the parts thoroughly healing by granulation. The man was sent out of the hospital cured in about six weeks.

CHANGE OF AIR IN CONSUMPTION.

FROM time immemorial, the profession in this country have considered it a matter of great importance to send their consumptive patients to a more genial climate than our own. Recent experience has led the faculty to believe that the southern coasts of England afford as much advantage as a residence in foreign climes; and warrants the physician, saying, with Yorick, "alas! my dear countrymen, where are you going?" Dr. Clarke, in his admirable work on Climate, and Dr. Johnson, in his classic and able work on Change of Air, have maintained, that this country affords situations in which there is little variation of temperature, and nearly as genial a climate as can be found in France or Italy. We observe that both these writers patronize an establishment at Undercliff, Isle of Wight, which has been prepared by a retired member of

the profession, and which is sheltered from the North and East winds, thereby peculiarly calculated for consumptive persons. The proprietor, Mr. Whiskard, being a member of the profession, has peculiar claims upon the faculty, and we are happy to observe Drs. Babington, Billing, Clark, Conquest, T. Davies, Hodgkin, and Johnson, among those who approve and recommend his establishment.

NECROLOGY.

It is with deep regret that we announce the death of that assiduous, zealous, and highly talented physician, Dr. Dill, who was several years resident medical officer at the London Fever Hospital. Dr. Dill was in the prime of life, in the thirtieth year of his age, and a few evenings ago he attended the meeting of the Association of Physicians and Surgeons for the investigation of cholera, when he appeared in perfect health. He was seized with fever, and died on Saturday last, the 14th instant. He was a humane, benevolent, and highly scientific physician, who exerted his abilities with unwearied zeal, in alleviating the sufferings of the poor patients in the above hospital. By his individual exertions the funds of the institution were greatly augmented; and the governors of that charity, as well as his relations and friends, will long revere his memory. Posthumous eulogy was seldom bestowed on a more worthy individual. In him was united every virtue which could adorn the human character. He was a loving parent, an affectionate husband, a sincere and unalterable friend. In all the relations of society he was a most honourable and good man; his moral worth, inflexible integrity, and urbanity of manners, rendering him esteemed by all, and now deeply regretted by his friends and acquaintances.

BOOKS.

A Practical Treatise on Uterine Hæmorrhage, in connexion with Pregnancy and Parturition. By JOHN T. INGLEBY, M.R.C.S. Surgeon to the General Dispensary and Magdalen Asylum, and Lecturer on Midwifery at the School of Medicine, Birmingham: 8vo. pp. 276. One Plate. London, 1832. Longman and Co.

A work evincing considerable research, much observation, and talent.

The Mother's Medical Guide, containing a Description of the Diseases, incident to Children, with the mode of treatment, as far as can be pursued with safety, independently of a professional attendant. By the late ROBERT BRADFORD, revised and improved by H. O. BRADFORD, M.R.C.S. 8vo. pp. 76. London, 1832. Hatchard.

The medical student and junior practitioner, as well as the general reader, will peruse this little work with advantage.

Journal Therapeutique, Mars 30; Journal Phrenologique, Tome 11; Medico-Chirurgical Review, April; The Edinburgh Medical and Surgical Journal, April; Bulletin Des Sciences Medicales, Sept.: The American Journal of the Medical Sciences, and the North American Medical and Surgical Journal, have not been received.

NOTICES TO CORRESPONDENTS.

Mr. S.—The communication is under consideration: we request a continuation of the last.

A Young Student.—This letter is written too hastily for publication.

A Pupil of the Little Windmill Street School, is too severe on his Thespian colleagues.

A Pupil of the Middlesex Hospital complains of the transportation of morbid specimens to King's College, for the instruction of those who are not Hospital Pupils, while no demonstration is given to those who have paid dearly as Surgical Pupils.

Case of Sandiland.—Press of matter has obliged us to omit the letter of deceased, stating that he had laboured under diarrhoea for several days previously to the supervention of cholera, and also the autopsy of the wife of this person, who had died of the epidemic.

All unpaid letters and parcels are refused by the Publishers.

Those residing in the environs of the metropolis, or in the country, are requested to order this Journal of their booksellers.

Dr. Seeds' paper is left at the Publishers.

Mr. Whitmore's communication will appear in our next.

ERRATA.

For "effusion," p. 355, read "affusion."

The name of Mr. Shearman was misrepresented for Mr. Sleeman in the report of the Medical Dinner at St. Thomas's Hospital.

London Medical and Surgical Journal.

No. 13.

SATURDAY, APRIL 28, 1832.

VOL. I.

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,

During the Session of 1831 - 32;

BY BARON DUPUYTREN,
PRINCIPAL SURGEON OF THAT HOSPITAL.

*Inflammatory, Scrofulous, and Venereal
Enlargements of the Testicles.*

THE art of the surgeon does not consist only in cutting away those parts which nature has stricken with death, but also to preserve those which the vulgar practitioner has not hesitated to amputate. How many unfortunates return from the field of battle, not worse treated by unskilful hands than by cold iron. We could cite a good number of hospitals in which the mania for operating has destroyed a great number of victims. How many surgeons, for example, do not hesitate to amputate limbs affected with white swellings, or tumours, without considering whether the lungs are the seat of tubercles or of other alterations. Never did this desire to operate appear to us more marked than in enlargements or swellings of the testicles. We must observe, that sadness, chagrin, and melancholy, have conducted many to the tomb, who submitted to this cruel operation. During a period of many years, M. Dupuytren has declined to operate in a great number of these cases, having referred to their origin. Every year about a hundred individuals, affected with enlargements of the testicles, are admitted into the Hotel-Dieu, and mostly these are discharged cured without any surgical operation.

Many such cases are now in the wards. In some, the enlargements are in the epididymis; in others, the body of the testicle is

affected; and in more, both parts are diseased. In these cases the swelling has supervened on blennorrhagia in three cases, and in two it supervened without any urethral discharge.

It is about two months since one of these individuals, aged forty years, applied for advice, in consequence of a tumour which occupied the right testicle. The organ was six times larger than its natural size; it felt hard, like a hydrocele; its surface was unequal, and it presented the usual appearances of scirrhus; the weight of it was considerable. Interrogated as to the cause of the disease, the patient replied, that he ascribed it to a bruise of the organ. In a great number of these cases, says the professor, I have had reason to conclude that the enlargement of the testicles is produced by external violence, ancient venereal affections, from a scrofulous disposition, or from internal disease, so I have formed a rule never to perform an operation before I have employed, during a month or six weeks, the treatment which I believe appropriate for the affection. The first account given by the patient led M. Dupuytren to suppose, that the tumefaction had been produced by external violence, and he, therefore, recommended the antiphlogistic treatment. The constitution of the individual did not indicate a scrofulous taint; accordingly leeches and emollient cataplasms were ordered to be applied to the tumour; a warm bath and a spare diet were recommended: these means, however, produced no benefit. He was readmitted into the hospital Nov. 11, and on hearing the history of his case he was thought to labour under syphilis. The professor prescribed sarsaparilla, china, and guaiacum, with pills composed of deuto-chloride of mercury one-eighth to half a grain, opium half a grain, extract guaiacum two grains. Experience has convinced M. Dupuytren, that these fractional doses act much better than those that are too strong, and therefore he ordered an eighth of a grain of sublimate daily, which was to be steadily increased to half a grain, which is the largest quantity he exhibits.

Almost always, after a month or two, a cure is effected by this plan; but in this instance it produced no benefit. The testicle had increased in size and become heavier; there was lancinating pain, which extended along the spermatic cord to the kidneys. Under such circumstances M. Dupuytren considered it dangerous to delay the operation any longer. He found, on close examination, that there was hydrocele, which he held to be symptomatic; but the chief disease was disorganization of the substance of the testicle itself. He did not consider the degeneration was advanced, as the patient asserted it was only three months duration. Had it existed for a year, M. Dupuytren would not hesitate to proclaim that the testicle would be found softened, grey, and, in a word, affected with cerebriiform cancer.

But what is the best mode of removing this organ? The answer is easy; by an operation easily and speedily performed. We make an incision, commencing at the inguinal ring and traversing along the anterior part of the scrotum, and carried inferiorly and posteriorly. The motives for this practice must be explained. The testicle alone is seldom affected by scirrhus; the disease extends to the spermatic vessels, and it is for this reason that the incision is carried to the inguinal canal; the incision is extended so as to enable us to remove with facility the testicle and its appendages, which would be effected with difficulty if the opening was only extended for two or three inches. The object of the posterior incision is also readily comprehended; if not prolonged to this part, the integuments of the scrotum would form a sac in which pus would accumulate.

The incision having been completed, the vessels must be tied; spasm, and the action of the air, cause them to retract, and there may be but little hæmorrhage. The testicle is now to be removed; it is to be seized, and the scrotum is to be secured, by assistants, while the cord is dissected out. If any vessel is divided it must be tied, because the effusion of blood would induce infiltration, inflammation, and abscess. It is necessary to remove all cellular tissue which surrounds the testicle, the cord, the membranes, and the cremaster muscle. We examine the cord, and if sound it should be divided above the testicle; but if altered, the incision should be carried beyond the diseased part if possible.

Divers proceedings are employed for the extirpation of the testicles of animals. Some twist the cord and cut it; others distend it, and cut it without twisting. We can easily conceive that this operation is very painful, in consequence of the position of the animals, and by the facility with which they diminish the weight of the abdomen. It is true that hæmorrhage is arrested, but this advantage would not justify such a proceeding on man. In Normandy the testicles of horses are

bruised between two sticks, and a gangrene effects the separation of the parts.

The ablation of the human testicles is accomplished by two methods. A simple section will occasion hæmorrhage, because the parts are not so retractable as in animals. A general ligature placed on the cord will include the vas deferens, the spermatic vessels, and nerves; but this plan is very painful, and should be obviated by the use of a partial ligature. When the cord is divided; we should use a sponge, or ablation, to discover the bleeding vessel; then apply a tenaculum, and tie the vessel only. The same practice must be preferred when the cord is divided down to the inguinal ring, as the retraction of the cord would inevitably give rise to internal hæmorrhage. When the bleeding vessel is secured, and sometimes it is necessary to apply more ligatures than one, the edges of the wound should be brought in contact, and union by the first intention induced. It is to be recollected that the integuments of the scrotum have a power of retractility and extensibility; the consequence of which properties is, that the wound dilates, and its edges are inverted, the skin on each side only being in contact. This disposition is a great obstacle to cicatrization, and it is to be prevented by the insertion of two or three sutures. This proceeding expedites the cure and prevents hæmorrhage.

Extirpations of the testicles are very rare at the Hotel-Dieu of Paris, though very common in other hospitals. The reason has been already explained. Every remedy should be first employed, and the result of this important precept is, that no reputed cancer of the testicle is extirpated, until it is first determined whether it has been caused by external violence inducing inflammation, by a scrofulous or syphilitic disease. Without this indispensable precaution, the patient is exposed, sooner or later, to enlargement of the other testicle. The following case is an illustration:—An agriculturist, aged 41, laboured under enlargement of the left testicle for two years: he had laboured under syphilis. The size, hardness, and lancinating pain, left no doubt but the disease was scirrhus. Ablation was proposed, accepted by the patient, and accomplished by Dr. C. The cord and glands in the groin presented no alteration; the wound cicatrized by the first intention, but in about a month the other testicle became affected. It was proposed to remove it, and feared that disease had extended into the abdomen. M. Dupuytren was consulted. He proposed to try the method mentioned above, before the operation was performed, and in less than a month a complete cure was effected.

In 1827 a man entered the Hotel-Dieu, with considerable enlargement of the left testicle. There were lancinating pains, extending along the cords to the groins and kidneys; the patient was very much ema-

ciated. There was no reason to suppose the malady was dependent on hydrocele, scrofula, or syphilis. M. D. conjectured that hydrocele might be complicated with a cartilaginous state of the tunica vaginalis; he proposed to make an explorative puncture before proceeding to operate for extirpation, which proved the disease was hydrocele, with the state of the tunic already mentioned.

MR. HETLING'S
SURGICAL LECTURES
AT THE
BRISTOL INFIRMARY.

Session 1831-32.

A NEW æra in the professional history of our Infirmary commenced, by the delivery of a regular Course of Lectures on the PRINCIPLES and PRACTICE of SURGERY, by Mr. HETLING, one of the Surgeons of this excellent Institution. We are favoured with the following part of the Introductory Lecture, in which the recent advantages conferred on this Hospital by the Royal College of Surgeons is forcibly pointed out to the consideration of the Medical Students in Bristol:—

GENTLEMEN,—The *Principles and Practice of Surgery* are the subject of the Lectures I am about to address to you; a subject of great extent, as well as of vast importance; and one more worthy of your attention, from its claim upon science and suffering humanity, cannot well be presented to your notice.

Previous to entering however, for the first time, upon the subject that is intended to engage our attention, allow me to allude for a few minutes to the circumstances under which I appear before you. Be assured the digression shall not detain you long.

A few months since the Pupils of this Infirmary requested "*a Course of Lectures on those subjects, a knowledge of which is considered absolutely essential to a Surgical Education.*" With this application, so creditable on their part, I immediately felt disposed to comply, from various considerations. I recollected that during the period of my attendance as a Pupil in this House, under Mr. Metford, I often lamented, with many other Students, that the valuable opportunity this Institution affords for obtaining a *practical* knowledge of Surgery, there was not added the acknowledged *advantage of Lectures* also, on the *Principles* of this department of the profession. To the recent application of the Students, the former impression of my own wishes and wants, when a Pupil, recurred to my mind so forcibly, that I instantly assented to their request, with a view to supply what still appears to me likely to prove not only beneficial to the Pupils attending the Infirmary, but ultimately to the Patients confined

to our care. I considered also, that these advantages might likewise be beneficially offered to the younger Members of the Profession in this populous city. The Lectures then, which I am about to address to you, owe their existence and whatever interest they may be found to possess, principally to the Pupils of this Infirmary.

Another consideration, though more strictly applicable to myself, will, I trust, be considered as not discreditable. Having been placed by the Subscribers to this Charity in a favourable situation for collecting and communicating information, I am desirous of convincing both them and the Pupils, that I am not inattentive to *its advantages for instruction*, and that in this instance, as in many others, I am desirous of treading, though with unequal powers, in the footsteps of those Gentlemen in similar situations, who now contribute with so much credit to themselves and advantage to the public, towards the improvement of the Surgical Students in the Metropolis.

It must be obvious, for many reasons, that in the routine of practice, both in this and all Hospitals, there is not a sufficient or appropriate time fully to discuss and elucidate before the Pupils the numerous important cases that are daily passing under review; and, consequently, many parts of Surgery escape notice without ample illustration.

I therefore propose to afford them an opportunity of reaping those advantages which are not to be obtained by the ordinary attendance on any Hospital. *In fact, my principal aim will be to exhibit those PRINCIPLES which warrant the PRACTICE of SURGERY in this House; or lead to different treatment in the Private or Public Practice of the most eminent men.*

In the execution of this design, it is intended to convey such information respecting the science of Surgery, as, while it instructs the Professional Student, may interest the man of general intelligence and enquiry. It is my wish, therefore, to give in the first instance, such a general view of the Surgical Art, as, though not prepared for the Public, yet shall be open to public access, without deterring the uninitiated.

I am fully aware that our profession is peculiarly, and more than any other, an insulated one, and that of such an extent and variety, as to be wholly beyond the reach and comprehension of all, except its particular votaries; and it is worthy of remark, that no one devoted to other pursuits, has ever become eminent in the profession of Medicine or Surgery. This branch of human knowledge alone affords matter sufficient for the exercise of the highest talents, applied with unceasing industry, and continued in action during the longest life. Yet I am quite convinced that the main principles of both may, with the greatest advantage to the interests of knowledge and humanity, be taught popularly.

It is part of my design to illustrate the *Principles of Surgery* by reference to cases in this Hospital, where every thing is open to inspection, and where consequently the statements are made in the presence of many observers, advantages which are not easily obtained but in Hospital Practice. And it is acknowledged on all hands that *no Hospital in the kingdom affords greater opportunities for the acquirement of Medical and Surgical Knowledge than this*; on this point I beg to refer you to those Students who have preceded you, and are now attending the London Hospitals; they will confirm the fact from their own experience and observation.

Superadded to these advantages it is considered important to mention one other, recently conferred on this Hospital by the College of Surgeons, namely, that Lectures delivered on our proposed plan will be recognized by the Council of that Body. By this new regulation our Hospital rises into greater importance, and now ranks with the first in the kingdom. Surely then it behoves both us and the Benevolent Trustees to this Charity, instantly to seize these advantages, and to secure for this Hospital—for ourselves—and for the Public, privileges so long wished for, and so highly desirable to the instruction, convenience, and the pecuniary interest, both of Parent and Student. It is therefore with perfect sincerity, and I hope from a candid and enlarged view of the subject, that I congratulate you, Gentlemen, and the Public at large, on the first step towards the formation of a regular course of Surgical Lectures, which I trust soon to see extended to the other departments of our profession, which, if properly supported and encouraged, cannot fail to afford you the best means of obtaining a Medical Education, which will considerably abridge your future labours in London, and will also enable you to pass through your various examinations with confidence and success.

It will not, I trust, be considered out of place here to recount the advantages which this city possesses for a great Medical Establishment. With a population equal to that of most of the capitals of Europe, with a large and well regulated Hospital, the Student here may practically learn the nature of most of the various diseases which affect man in every part of the globe.

I trust you are truly sensible of the importance and dignity of the profession of which you expect shortly to become Members. I shall, therefore, witness with peculiar satisfaction an increased zeal and spirit among you for the establishment and support of a Medical School. Public instruction can be effectually imparted only by public munificence, and it will not be disputed, that the science of Medicine and Surgery has not only the first claim to the patronage of their own particular votaries, but upon society in general.

Thus, then, from a combination of circum-

stances, I have been urged to occupy a position in this Institution, from which many considerations would have induced me to shrink. Any feeling of personal anxiety or reluctance, which I have experienced in undertaking this task, I have cheerfully merged in the interest with which I have always contemplated the great advantages and improvement to be derived from our meeting two or three times a week, *specifically for the purpose of Public Instruction* within the walls of this Institution. Under this view, there is assuredly enough of what is encouraging in reference to this essential point, to banish every feeling of despondency. In common with any new undertaking, it must at first expect some imperfection and difficulty. Not having any predecessor in the department I have chosen (the usual good fortune of most Lecturers), I have chiefly to rely upon my own exertions; but I trust that the many deficiencies on my own part will be amply compensated for by the illustrations, the numerous surgical cases, and facts that daily occur in this great Hospital will afford; to which will be added, the splendid and scientific *museum* belonging to Mr. Richard Smith, and also the *library* presented to this Institution by Mr. Richard Smith and Mr. Lowe, together with my own *preparations, plates, and library*, which are of no inconsiderable extent. And it would be ungrateful, if I did not most thankfully acknowledge that my colleagues in office, both medical and surgical, with Mr. Morgan, have offered in addition every assistance and support. The honour of their attendance, and the other gentlemen visitors on this occasion, is the best proof how desirous they are by their presence to excite a spirit of emulation, and of encouraging not only professional education in general, but in particular patronizing our new undertaking. May we prove ourselves worthy of the high compliment so liberally conferred upon us by gentlemen of their station, whose time is so valuable at this hour of the day. With these most desirable resources, aided by energy and perseverance, I trust to be enabled to surmount the difficulties of our commencement which farther opportunity, leisure and study, I hope will render more worthy your acceptance. Even from my Pupils, I expect to collect many useful facts and hints, which, from the wide range of our varied engagements, will escape the most vigilant observer. Mutual communications of this nature will elicit diligence, talents, and observations, and concentrate a union of improvement and intercourse highly advantageous to both parties.

Under this view I beg it to be remembered, that I am addressing myself to Students who, as yet, have their knowledge to acquire, and to whom many illustrations are useful, which to finished Surgeons, accomplished in their profession, may appear unnecessary.

I purpose, then, in the first place, to give from my own knowledge, *a brief sketch of*

the professional history of the Infirmary during the last 40 or 50 years, and of the motives which have urged me to comply with their solicitation to give Lectures.

In attempting this in as concise a way as possible, I have a double intention in view—in the first place to satisfy and to interest your curiosity, and in the next, more particularly to excite that enthusiasm in the cause of science and humanity which most assuredly, if effected, will lead hereafter to reputation and professional distinction. I wish you to remember, that it is chiefly to the education I have received in this House that I am indebted for the place I now hold in the profession, and for the honourable appointment conferred upon me by the large body of Subscribers to this benevolent Institution. I mention this not from any vanity or egotism on my part, but for the sake of the example—with the higher view of stimulating your diligence and exertions, of rousing that spirit and ambition to excel, which if judiciously directed will afford you a similar prospect of success.

Having had the good fortune to be initiated into the profession by Mr. Metford, one of the surgeons to the old Infirmary, and to have lived for many years under his roof, I have the satisfaction of adding, that however highly the public estimated him as a Surgeon, I have reason to speak of him not less highly as a friend and instructor; of his invariable kindness, which directed my early studies and pursuits, and which has assisted every future step of my progress in professional life. Under his tuition, and that of his four colleagues, the late Mr. Richard Smith, Mr. Lowe, Mr. Noble, and Mr. Yeatman, I received, during five years, the first rudiments of my Surgical Education, and I should be guilty of an outrage to my own feelings, were I not, on the present occasion, to express the high estimation, and the grateful sense, I shall ever retain of their example and abilities. But my feelings will not allow me to stop here. It is impossible to sit in this room and not pay a tribute of gratitude to the memory of the late Mr. Richard Smith, that distinguished individual who commenced the valuable collection of preparations with which we are so fortunately surrounded. By his energy and talents, fortitude and labour, by his unwearied perseverance, has this collection been formed, which, in the number of specimens, the exquisite art by which they are displayed, and the expence at which they have been made, is indisputably unrivalled, at least in this city, as the workmanship of one unaided individual, who had no other inducement but his own zeal and enthusiasm—no pecuniary means to assist him but his own private fortune. The force of these observations will probably not be fully appreciated by the younger part of my audience; but it will be sufficiently felt and understood by the best informed in our profession. Mr. Smith, from the neatness of his hand, and

the quickness of his eye, and from the character of his mind and physical powers, appears to have been fitted by nature with all the properties requisite to form the Anatomist, the Physiologist, and the accomplished Surgeon. Indeed I do not hesitate to assert the opinion, from my own personal knowledge, that in every point of view, he is to be considered, at least, as the John Hunter of Bristol. And in the language of Sir Charles Bell, in lately speaking of his great prototype, "may we, in looking upon this suite of morbid specimens, consider that great Surgeon as still addressing us in very emphatic language. It is for us to take advantage of a treasure so generously devoted to our service, and through us, to the interests of humanity." This highly-gifted individual naturally attracted the attention of myself, and the rest of the Pupils of that day, towards him; and on one distinguished occasion he most kindly and considerately invited me to his house, to meet the present Sir Everard Home, who came to Bristol to view his museum. At that period I perfectly recollect, after going over every individual specimen, which occupied several hours, that gentleman's declaration—that it was the most unique, skilful, and extensive museum he had inspected, as the production of one individual, excepting, of course, the unrivalled Hunterian collection. I thought it might be of advantage to inform you, in this hasty way, of the origin, and in what manner this collection has been formed. Perhaps hereafter the present Mr. Richard Smith may be prevailed upon to give a more accurate and detailed account of this museum, and also a more extensive history of our Infirmary. I confess myself unequal to such a task; neither can I allow myself to venture further on this subject in point of time, except to express that to his munificence and liberality we are indebted for the removal of the museum from his private residence to this Institution, and for presenting us with its unlimited use for the public instruction of the Medical Students of his native city.

With pleasure I recur to these early recollections, and I cannot quit the subject without attributing chiefly to the Surgical Tuition I received from Mr. Metford, and the other gentlemen referred to, whatever practical knowledge I possess. The best parts of the present rules of practice in this House have been transmitted from those gentlemen. With their instruction and example before me for five years, I afterwards repaired to London, and placed myself for two years under the lectureship of the late Mr. Cline and Sir Astley Cooper. Mr. Richard Smith and myself were among the first of Sir Astley Cooper's Pupils; and to this moment we have the honour of receiving from him every mark of kindness and friendly assistance. In addition, I have now been nearly 25 years appointed one of the Surgeons to this Hospital.

It will be readily admitted that the task I have undertaken is one of no small difficulty and extent; and although it has not ceased in some degree to occupy my mind ever since my appointment of Surgeon to this Institution, I shall feel more forcibly at every step of my progress the great indulgence I must necessarily require. Yet I trust that the constant application for so many years which I have paid to the study and practice of Surgery, will indicate a life sufficiently long to warrant the character I have presumed to take, and which I hope will entitle me to your unbiassed attention and regard.

Trusting this digression has not been altogether unacceptable, I shall proceed to make *a few general preliminary observations on those elementary studies more strictly allied to surgery, together with some other miscellaneous remarks, and also a few suggestions of the best plan for attendance on Lectures; concluding with a brief view of our station in society with respect to professional conduct and character.*

ON THE
EPIDEMIC DISEASES
WHICH
PREVAILED IN IRELAND.

An Account of the most remarkable Epidemic Diseases which occurred in Ireland from the earliest Period to the present Time.

As the superficially informed of many countries discredit the authenticity of the early chronicles and history of Ireland, and as these have been quoted in the succeeding statements, it is perhaps necessary to prove that they are founded on a sound and solid basis. There is no country in the world whose ancient history is more powerfully attested; but this is not the place to offer proofs of the fact. Suffice it to state, that the truly learned of all countries admitted it, and do admit it, as the few following citations amply testify.

"The early history of Ireland," says the impartial author of the article Ireland, in the London Encyclopædia, 1829, "is not more deeply sunk in uncertainty, or more intimately involved in fable and romance, than other early records. The history of ancient Greece is a tissue of absurdities; the story of ancient Rome consists of a series of agreeable fables—tales suited to the anxiously-inquisitive ear of infancy. But these initial fictions do not appear to have cast discredit on the subsequent pages of these histories—the chaff has been separated from the wheat—the dross from the pure metal—by the discernment of the classic writer; and his judgment has been exercised in the appro-

priation of his belief. This principle is a wise and necessary one—one which must always be admitted when the objects to be described are separated from us, not by centuries of time only but by millenia; when records have become illegible, unintelligible, and obsolete; when they have been carried away by the literary spoliator; or, from the perishable nature of their materials, have yielded to decay. Ireland still boasts the possession of her bardic records, the psalters of her great religious institutions, the traditions of her children, and her perdurable monuments of stone, which exhibit to the enquiring eye, living testimony of her ancient learning, sanctity, and civilization. These internal evidences are supported and confirmed by the concurrent testimony of accredited historians, in all cases where collateral testimony can be expected. This being admitted, we, at least, place the ancient history of Ireland upon as sound and as solid a pedestal as the historians of other countries have raised for the fabled deities of their early ages."

Many of the principal records of Ireland, like those of all ancient nations, have, in a great measure, been destroyed by time, and a few of them now remain; but these are admitted, by all who have any pretension to a knowledge of history, to be genuine and correct. Even Camden, a partial writer, admits, "that Plutarch was right when he called Ireland, Ogygia, or the most ancient;" and that the antiquities of every other nation, compared with those of Ireland, were but of yesterday. "No nation on the face of the globe," says Plowden, "can boast of such certain and remote antiquity, none can trace instances of such early civilization, none possess such irrefragable proofs of its origin, lineage, and duration of government." The Venerable Bede observes, "it was in this country that foreigners received the first rudiments of education."—B. 3. c. 8. It was here that Alfred retired to study, "in Hiberniâ omni philosophia animum composuit."—Gul. Malms. lib 1. The polite and learned gentlemen of the middle ages visited this country "amandatus est ad disciplinam in Hiberniâ."—"Du temps de Charlemagne 200 ans après *omnes vero docti* étoient d'Irland," says Scaliger the younger; while Mosheim (Eccl. Hist. century 8.) observes, "the Hibernians were lovers of learning, and distinguished themselves in those times of ignorance (the dark ages) by the culture of the sciences, beyond all other nations, travelling to the most distant lands with a view to improve and to communicate their knowledge, is a fact with which I have been long acquainted, as we see them in the most authentic records of antiquity, discharging, with the highest reputation and applause, the function of doctors in France, Germany, and Italy, both during this and the following century." Whatever credence may be given to these authorities in these times, they are

sufficient, in my mind, to produce conviction in all unprejudiced persons, and to warrant the quotations which are about to follow from the ancient records of this country.

Few of the original medical works of this country are extant, and those being written in the native language cannot be understood in these times. Mr. O'Reilly, the Irish historian and antiquarian, whose essay on the Brehon Laws received the prize of the Royal Irish Academy in 1825, has not met any work by a native physician earlier than the tenth century, and this was a compilation from the works of the physicians of Montpellier; it was called the "Lily and the Rose." He says, that O'Balgaidh's (O'Bulger's) book was in part a translation made by Nicoll O'Hickey, M.D., 1400, and improved in 1466 and 1468. He has another work written in 1469, also a translation from the Latin, by Donagh Oge O'Hickey. He has a great many other tracts, which do not appear to be translations, nor are foreign physicians ever quoted in them. "But this does not prove," says he, "that there may not be original works by Irish physicians still in existence." Under such circumstances, I must quote from the ancient archives and historians, as the only available authorities.

We are informed by the antiquarians and primitive archives of Ireland, that the first inhabitants of the kingdom were destroyed by epidemic disease about 300 years after their arrival; and that the mortality was greater at Howth, near Dublin.* Such was the fate of the Partholarians, A.M. 1999. The next inhabitants of the country were the descendants of Nesmedius, 3,000 of whom fell by epidemic in the county of Cork; and so great was the destruction at this period, that the whole country remained uninhabited for many years.† We are further informed, by history, that pestilence appeared among the Irish in the years of the world 2661, 2737, and 3487. It appears, too, that surgery was practised at a very early period in Ireland. It is on record that the strict antiphlogistic treatment was recommended to O'Conner, king of Ulster, whose skull was fractured by a fall, A.M. 3940. This is not surprising, when we bear in mind that so early as the reign of Ollamh Fodhla, or the learned doctor, the fortieth king of Ireland, A.M. 3236, the different learned professions were held in rank and estimation next to the blood royal. So early as the year 3050 a law was passed that the doctors in the different sciences should have estates settled on them, that they might not be disturbed in the prosecution of their studies; and they were free from every service. At the triennial convocation of all the kings of the country at Tara, the doctors had the first places assigned them.

There were several colleges and universities throughout the kingdom, but the chief one was at Tara, and was called the College of Doctors.

The Druids were numerous at the college at Tara; they held the oak in great reverence, and that the mistletoe was a sovereign remedy against all disorders. Two white heifers were sacrificed, when the high priest, dressed in white, cut it at a certain season with a golden sickle, and received it on the saquin: a remedy still in use, and praised by no less a person than the late Dr. Baillie, of London.*

The late Mr. O'Halloran, of Limerick, whose surgical works are well known, states, in his History of Ireland, that hospitals were established in that country before the Christian era, and that a judge, physician, historian, and poet resided at each of the Irish courts even so late as the second century; and that the doctors of physic and philosophy received the biretrum or cap on the head, and a gold ring on the finger, and in the diploma were, the words, "Biretrum in capite, annulum in digito, et singula doctoratus insignia," and this 725 years before the Christian era. Biretrum is not a Latin word, and cannot be found in any of the classic writings;—it is an Hibernicism, from Bar, a man of letters, and Eadagh, a covering—thus birede. In a word, so greatly and highly esteemed was Ireland for learning and the liberal arts, especially from the fifth to the twelfth century.—Wharnton. Ang. Sac. par. 2, p. 91. Guil. Malm. de Reg. Ang. c. 8.

To return from this digression, and resume my account of the Irish epidemics, I have to state that Bede informs us, "two-thirds of the Irish were destroyed by what he calls pestilence, A.D. 667. The country was again ravaged by famine and disease in the years 685 and 781. The next period of epidemic disease in this country was A.D. 1011; when several of the professors and students perished at the University of Armagh, as we are informed by the Rev. Dr. Lanigan in his Ecclesiastical History of the Irish Church: Soon after this, famine and pestilence destroyed half the inhabitants of England, A.D. 1086.† England was again scourged by pestilence, which was followed by a most fatal dysentery, A.D. 1314. So great was the scarcity of food, that it was with some difficulty the king's household could be supplied.‡ Again, the fatal year of 1348, in which plague desolated Europe, was uncommonly wet from June to December, in Ireland. The crops were deteriorated and destroyed; famine and pestilence succeeded, and no less than 14,000 persons fell victims in Dublin alone. Epidemic diseases also ravaged England during that year."§

* Psalter of Cashel.—Keating's Ireland.

† O'Flaherty's Ogygia, or Ancient Island, b. 3 c. 2.

* Observations on Medicine, 1825.

† Sax. Chron. 188.

‡ Lingard's England, v. 3.

§ Op. Cit. v. 4.

This devastation first broke out in 1345, in Caehay, or Cathai (Western Tartary), whence it spread west, north, and south, over every part then known to be habitable of Western Asia, Africa, and Europe. Mr. Marshall, in his work, entitled *Mortality of the Metropolis* in each year from 1629 to 1831 (201 years), quotes numerous historians who described the pestilence to which I allude, and among these was J. Cantacuzenus, an accredited Greek historian, whose work was translated in the seventeenth century. It appears by the statements of this writer, that in the year 1347, 300,000 persons perished at Naples, and 23,840,000 within the pale of the Roman See. In 1348 there perished in Venice 100,000 persons, in Lubeck 90,000, in Paris 50,000, St. Denis 14,000, in Germany 1,244,434; in the city of Norwich, between the 1st of January and the 1st of July, 1348, 57,104, and according to another account 57,343, and in Yarmouth 7,052. Rapin states, (b. x.) that one half of the English nation were swept away. London especially felt the effects of its fury; it is observed in one year (1348, 49), above 50,000 persons were buried in a church yard belonging to the Cistercians. The disease extended to Scotland, and in Ireland it committed great ravages among the English settlers, while it affected the native Irish but partially. The mortality induced by this and most other pestilential diseases, differs widely from that by the *cholera*, and must have been unknown or forgotten by those who considered the latter contagious.

The celebrated Spencer, the historian, Morrison, and others, inform us that in the year 1564, and the succeeding years, "the growing crops were destroyed by the soldiers of the queen (Elizabeth), as famine was deemed the speediest and most effectual means of reducing the Irish; and that the country was left void of man and beast by the united ravages of war, famine, and disease." Dublin was said to be visited by plague, A.D. 1462, and many persons were destroyed. The sweating sickness next appeared in England 1485, and reappeared in 1528, when it destroyed 40,000 persons. The Irish historians about this time, Campton in 1570, Camden in 1584, and Morrison, both partial writers, asserted "that fever and dysentery were endemic in Ireland"—an assertion contradicted by future experience. Dr. Boate, in his *Natural History of this country*, published during the Commonwealth, made a similar groundless assertion. During his time, 1649, the war of Cromwell was carried on in the most sanguinary manner in this kingdom, and was followed by famine, fever, and dysentery, so extensive as nearly to destroy the entire natives. Dr. Boate* and others, said, that these endemic fevers and fluxes were cured

by the barbarous natives by their usquebaugh, or aqua vitæ. or whiskey.

Though the plague visited London in the years 1626, 1636, and 1675, there is no account of it extending to Ireland. We are told by the English Hippocrates (the judicious Sydenham) that fever and dysentery appeared in England in 1669, 70, 71, 72, 75, and 83. During the winter of the last year the Thames was frozen, and carts passed thereon; and fever was more severe in this than in any of the preceding years. Morton described the dysentery of London from 1666 to 1672 as contagious; while the illustrious Sydenham, and the classic and accurate Willis, state that the disease in 1669, 70, 71, and 72, was not contagious. It is also well worthy of notice that Sydenham used bleeding, purgatives, sudorifics, and anodynes in the epidemic fevers he met with, from the year 1667 to 1690. So that general blood-letting is no new remedy in fever, as some imagine.

Dr. Rogers informs us that fluxes and fevers were very prevalent in Ireland in the years 1728, 29, and 30;* and Dr. Maurice O'Connell, in his book, *De Morb. Acut. and Chron.* 1746, recommends opiates as of wonderful efficacy in dysentery. The learned Dr. Rutty, of whom Cullen has made honourable mention in his *Materia Medica*, confirms the account of Rogers as to the dearth of provisions in 1729, and the disease consequent thereon. He also gives an account of the next period of calamity in Ireland, which was induced by the great frost that commenced the 29th December, 1739, and continued to the 8th of February, 1740, when famine and fever supervened, and made tremendous havoc among the people. The summers of 1738 and 39 were wet, though in both years there was an abundance of provisions. The winter of 1739 and 40 was excessively cold, with a most intense frost of seven weeks continuance, attended with high piercing winds at S.E. and N.E., the endemical winds of the season being W. or S.W. There was a good crop of most sorts of grain in 1740. Dr. Rutty, who accurately described the state of the weather and diseases of Dublin for forty years, from 1725 to 1766, remarked, "that dry weather was peculiarly productive of fever in Dublin, and also wet and cold summers." Opinions which the sad experience and ample observation of future practitioners too fully confirm.

In the autumn of 1740, the potato crop having failed, there was a great scarcity of food, which bore double price in many places. Fever and dysentery appeared over the whole country, and destroyed 80,000 persons. The years 1741 and 42 were times of drought, dearth, and sickness, all over Ireland; so great was the mortality in the first year, that the roads were spread with

* Essay on Epidemic Diseases of Cork from 1708 to 1744. Dublin, 1733.

* Nat. Hist. 1652.

dead and dying bodies, men were of the colour of the raw vegetables on which they fed: two, three, and often more, went on the same cars to the grave, and many were buried in the fields and ditches where they perished.* Similar melancholy instances occurred in 1800 and 1817.

Dr. Huxham has left a lucid account of the fever and dysentery which appeared at Plymouth in 1740, which differs very little from that given above by the Irish physicians. The histories of the epidemics to this period, given by Rogers, O'Connell, and Rutty, bear a wonderful similarity to the fevers and dysenteries of 1817, 18, and 19. These writers also asserted, that low and putrid fevers (typhus) annually prevailed during their respective observations, and that the diseases of 1741 were not new to them. It appears then, that famine, want of employment among the poor, bad clothing, want of cleanliness, were the usual causes of the fevers and dysenteries in this and all future periods, as we shall see by the sequel: some added contagion, especially in the years 1741, 1800, 1817, 18, and 19, 1822; but scarcely any one in the year 1826.

But to resume my narrative. The next period in which fever and dysentery appeared in this country was in 1800. General disease was now induced, partly by the unfortunate civil war of 1798, which caused a vast destruction of grain and all the necessities of life, by neglect of industry, and immense destruction of property, that its effects were felt in dearth, famine, and disease, for two years after the rebellion. The year 1799 was designated "the hard summer," by the lower classes, so difficult was it for them to procure food. The harvest of 1800 failed in every part of Europe, and the scarcity and wide-spread distress was greatly aggravated in this country, and in England, by the waste of the war with France, causes which pressed heavily on the Irish, who were badly prepared for such an event, after the recent disturbances: hence fever raged among them to a great extent, especially in those districts which had been the seats of insurrection. It is much to be regretted that there is no authentic account published of the fever of this year.

The next visitations of fever and dysentery to Ireland were in 1817, which were as general and destructive as any recorded in history. During the summer and autumn of 1816 there were 142 wet days, the corn was damaged, lay in the fields, and generally malted; before the end of autumn there was a great scarcity of food, the poor fed on esculent plants, they removed the seed-potatoes from the earth to allay the cravings of hunger, and were obliged to feed on loathsome substances in some places. The next season was also wet, there being 105 wet days to

August, 1817, which destroyed the oat and potato crops. The three first months of 1818 were wet and stormy, the summer unusually hot, a failure of the hay and oat crops; but otherwise a plentiful harvest. Famine, fever, and dysentery, were severely felt in the north, and soon in every part of Ireland during the summer of 1817. Dysentery followed the fever in the summer of 1818, and was very prevalent and fatal in Waterford, Kilkenny, Cork, Tipperary, and Kerry; it was very partial in Connaught, and not at all in Ulster. Fever appeared in 1816, became decidedly epidemic in the spring of 1817, and extended to England and Scotland in 1818; but less in London than could have been expected. The population of Ireland was then estimated at six millions, and of these eight hundred thousand were affected by disease, and forty thousand were ascertained to have been destroyed by the conjoint ravages of famine, fever, and dysentery. The fever spared neither age, sex, nor condition; but was most fatal to the poor. For an account of the rise, progress, and treatment of the epidemic fever of Ireland, during this period, I can refer to numerous valuable works; as those of Drs. Barker and Cheyne, drawn up at the desire of Government: the excellent and perfect works of Drs. Harty, Mills, Cheyne, Stoker, Grattan, Crampton, O'Brien, Percival, Callan, Geary, Milner, Barry, and many others, amongst which the many valuable Essays in the Dublin Hospital Reports are not to be forgotten. The disease as it appeared in England, has been described by Drs. Bateman, Armstrong, and in Scotland, by Drs. Duncan, jun., and Welsh. Having so many records before the public, it would be a work of supererogation to allude to the subject further in this place.

The next epidemic fever that appeared in Ireland was in the years 1821 and 22. The spring of the first year was unusually cold and inclement, attended by high winds; the summer was cold and variable, the changes of temperature great and sudden in June and July; the autumn was wet and warm; the potato crop failed, and the distress in the South was unequalled since the year 1741, when dysentery and fever succeeded each other, as they do at present. So great was the distress among the poor in 1822, that they were obliged to live on weeds and esculent plants; and as the black cattle died of starvation, their carcasses were greedily eaten by them. In some places they collected rape, water-cresses, wild mustard, nettle-tops, and dandelion, which they mixed with oatmeal for food, or with the blood of the animals slaughtered in the markets; others bled their own cattle, and mixed the blood with milk and vegetables; but there is no truth in the assertion of Mr. Cobbett, "that the Irish ate manure." Though the efforts of charity had been incessant through every part of the

* Dr. Harty on Typhus, 1820, p. 119.

kingdom, and more extensive than at any former period, they were insufficient to afford relief, which induced the sister kingdom to come forward, with a noble and characteristic humanity, to assist in a benevolent and bounteous manner the distresses of their fellow-subjects. The English nation subscribed the large sum of 304,180*l.* which was distributed in money, food, and raiment, among her famishing poor. Fever and dysentery prevailed very generally over the country, and differed not from those diseases in 1817. Both maladies diminished in 1823, but again increased from April to December, 1824, and were said to be aggravated by the warm moist weather of that year; it appears, however, that every diversity of atmosphere may be antecedent to, or combined with, these diseases. I may here remark, that the Irish poor are much more liable to dysentery than the better classes: this is owing, in a great measure, to their aliments, to their constant exposure to the inclemency of a most humid and variable atmosphere, and to their unparalleled wretchedness. Their digestive organs are predisposed to constant relaxation and debility; and on the application of cold to the abdominal region, or lower extremities, diarrhœa or dysentery rapidly supervene.

Fever was again epidemic in the year 1826. The spring and part of summer, from the end of March to the end of June of that year, was remarkably dry, not a single wet day during this period, a thing heretofore unobserved by the oldest inhabitants. The oat, hay, and potato crops were nearly destroyed, and never were more deficient. The labourers had no employment, and the tradesmen were in a similar predicament, on account of the unprecedented distress of both British and Irish manufacturers; the prices of the food and necessities of life of the lower classes were double, and in some places trebled, and the poor had no means of procuring, in many instances, more than a solitary meal for their numerous families. Enervation of body and depression of mind followed such debilitating causes, the starvation became general, fever appeared, and was aptly designated "famine fever," and dysentery also became very general. The various fruits were very abundant and ripe earlier than usual, they were eaten freely to allay thirst, and induced inflammation of the bowels, cholera, and dysentery. It should be also stated, that the end of summer, before the new crop is matured, is a very trying period with the poor of Ireland, most of whom at this time, from want of employment and dearth of provisions, are unable to procure more than a scanty meal a day for their very numerous families; hence disease always presses on them at this season, and proportionate to the abundance or scarcity of their food. The members of each family are exposed to the same depressing and pre-

disposing causes; and when one of them is attacked with either fever or dysentery the whole of them generally suffer.

On perusing my case-book I find that fever was very prevalent among the poor in the months of May and June, 1826. The first stage, or that of debility, was slight and protracted, so much so that it was often a difficult matter to persuade many feverish patients they were labouring under the disease. Some of them would not remain in bed, or take any medicine, though others of the same family had well marked even the severest forms of fever. I have also remarked this occurrence in the fevers of 1817 and 1822. The second stage, or that of excitement, was generally violent and protracted, even after a slight preceding debility. The temperature was often as high as tropical. The stages of debility and convalescence were mostly very tedious. Few persons died of this fever, though it was very prevalent among the poor; nor does it appear that the disease was more fatal in Dublin, or throughout the kingdom. The fever increased very much in Dublin during the months of July and August. All the fever hospitals there and throughout the country were crowded; sheds and tents were obliged to be erected adjoining them; and in some remote parts of the country the poor were placed in temporary huts on the road-sides, for want of accommodation. The number of patients registered in Dublin from the 1st of January to the 1st of May, 1826, was 2,590, averaging about 600 a month. In May 850 were registered, in June 962, in July 1,205, August 1,628, September 1,768, in October 1,839. The month of September was very dry and warm; the vicissitudes of October ranged from the highest to the lowest degrees of the thermometer, and the end of the month was cloudy, with piercing winds. The early part of November was unusually fine and frosty, nearly as mild as spring, but there was wet, cold, and snow about the middle of the month; the weather again became soft and open, and continued so during December; and vegetation was so luxuriant, that few persons remembered so mild a winter after so warm a summer and autumn. The fever was accompanied with, or succeeded by dysentery, during the autumn; and I found the acetate of lead and opium the most certain and efficient remedies—in fact, scarcely ever to fail. I found this form of medicine of the most essential service in pulmonic and uterine hemorrhages, but I used it in much larger doses than usually recommended, and without any bad effect. Dr. Stoker asserted at a public meeting in Dublin, in August, that 10,000 persons had then passed through the Cork Street Fever Hospital, and that the disease was slight, and yielded as much to a dietetic as to a medicinal treatment. He was decidedly of opinion the disease did not arise from contagion, in which nearly the whole profession

coincided with him. The temperature during summer was often 85° in the shade, and so high as 135° in the sun. The hay and oat crops were reduced to a third of the ordinary produce, and the potato crop to one half. Here again want of food produced fever and dysentery. These diseases continued during the spring and summer of 1827, until the British ports were thrown partially open to the admission of foreign corn, when fever declined in June and July, though dysentery continued, and was generally ascribed in this country to the use of Indian flour and meal. Severe diarrhoea was also very prevalent. It is worthy of remark, the months of June and July of the year 1827 were very changeable, almost every possible variation of temperature being experienced daily, with moisture and cold, which with the other predisposing causes already mentioned, induced the dysentery and other bowel complaints of that period. From the above abridged account of the fever and dysentery of Ireland, it appears that scarcity of food or famine, variations of temperature, and the wretched state of the poor, have ever been the causes of these diseases amongst the unhappy poor of that country. The recent Fever Hospital Reports by Drs. Stoker and O'Brien, of Dublin, render it unnecessary for me to continue my description from 1828 to 1832.

DISTORTIONS OF THE HANDS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

IN describing the process I used to cure the patients whose cases have been related, I enter into competition with no one. I shall describe the process and principles by the careful application of which my success was produced. Whether it were more or less rational, as well as successful, than those practised by others, I willingly refer to the judgment of you and of your readers.

The Baron Dupuytren, in the extracts you have published, pp. 267 and 268, from his lectures, says he used instruments whose effects, in one case, were injurious, and in the other, he *seems* to think were beneficial; but in neither does he give a description of the instruments, nor any specific statement of the alteration he contemplated in the structure and action of the diseased parts, though he certainly intended them to contribute, in some way, to remove, or otherwise remedy, the disease. This being the case they need not be farther noticed here.

The individual concerned in the second case, which I have related, and who wished to convert me into a tool, of which had he directed the operations, must have injured the patient, and of course thrown the disgrace

due to his folly upon me, put me in possession of his design, for the instrument which HE SAID would effect a cure: it was a flat-board, cut to the shape of the arm, and to be bound upon it with bandages to keep it in the state he intended, and the other bandages to be passed through holes in the board, tighter and tighter, till the hand, in all its parts, should become quite straight, when, according to his notions, the patient would be quite well. This was simplicity itself, with *quant. suff.* of supererogation. To prove this I will show the deranged state of the hand and arm, which it was intended to rectify.

The hand was always clenched, so that the fingers could not be extended by any exertion of the voluntary muscles; and when an attempt was made to open the fingers by force, pain was produced, and had the forcible extension of the fingers been permanent, in hope of getting them straight, inflammation, and its consequences, would have resulted, in proportion to the fortitude of the patient's endurance, and the exertions of the practitioner in affecting that extension. If the tendons had been divided, which I have sometimes known to be recommended, though I never saw it practised, the well-known consequences of wounding tendons, point out clearly what would then have ensued; and, after all had the hand been bound upon the board till it became quite flat, and the fingers fully extended, it still remains to be seen how that treatment would have restored those members to their natural powers of action. The answer would be, that of the old woman, who said, why, bind them down tight and keep them straight a long time; and they will at last recover their own powers.

The notion that depriving parts of their powers to act is the best way of restoring them, is so manifestly absurd, that if we did not see it daily practised by those who pretend to cure distortions of the body and limbs by depriving them of all motion, one should not think that such advice could possibly be given, even by the most ignorant.

The third case was related to show the extent to which distortion may be produced and kept up under peculiar circumstances, without proving fatal. The whole of my treatment may, however, be explained by the particulars of the first case; but I shall detail, previously, certain circumstances, upon the right understanding of which the success of that treatment must depend.

These distortions are, sometimes, connected with diseases in the nerves. When such is the case, proper remedies should be applied to the nervous disease, at the same time with that of the distortion, otherwise both complaints will be aggravated. Some of these nervous diseases are irremediable, and when curable they frequently continue a long time.

Thirty years ago I knew a boy, who was then twelve years old, and was passing rapidly into a state of permanent distortion, similar to that of the lady described in the third case. Every thing which medicine, surgery, and mechanism could effect was tried in vain. He still lives irrecoverably fixed in one position; but he has a contrivance so managed, that he is placed in it, conveyed from the house, and seated upon a horse, which is led by a servant, so that he has the benefit of air, exercise, and the enjoyment of the surrounding scenery.

Disease, or accident, may produce such distortions, which then are objects of treatment, totally distinct from that of the fingers, now the subjects of this inquiry.

Reference to the figures in Paxton's book will afford a demonstration, that the flexor digitorum sublimis vel perforatus, and flexor digitorum profundus, vel perforans muscles, originate in a mass of fleshy fibres, attached to the bones of the fore-arm, near the elbow joint. They are firmly attached to those bones and covered by a fascia, which partakes of the nature of ligament. As the muscles proceed towards the hand, the bulk of muscular fibres diminishes, and the quantity of fascia increases, till it gradually becomes tendon, when it ceases to attach itself to the bones, but becomes what may be called a cord, detached from them. In this state, it passes freely under the annular ligament of the wrist, divides into distinct cords, which pass over the metacarpus to the fingers, and passes freely through the slit, or fissures, in the ligament of the joints of each finger, till it is finally attached to the third joint, very near the extremity of each finger.

It is the general nature of all the muscles, which contribute to loco-motion, to be thus composed of muscular, ligamentous, and tendinous fibres. The muscular being the weakest, and of the loosest texture, contract more in proportion to their length, and increase more in their bulk and diameter than either of their other substances. A consequence of this construction is, that when the arm is forced into action, the muscles of the fore-arm, towards the elbow, are thickened, and, at the same time, rendered firmer in their texture, being retained in that state by the will of the Being which directs its motions; and the tendinous parts of the muscle, not being liable to the same check, would, if not fixed and confined by some obstacle, slide upwards, as far as the contractile action of the muscle would draw it.

To apply this to the case described, it will be seen that if the patient's hand were flexible and free to move in every direction, and were laid flat upon the board, as my ancient would-be dictator desired, it must have remained there very quietly as long as it were compelled to be so.

In that case, while the hand was at liberty; it might be moved freely in every direction;

but when the flexor muscles, whose principal seat is on the upper part of the fore-arm, were forced into action by temporary contraction, the extremities of the fingers, firmly connected with the tendons, were retracted, as much as the bellies of the muscles were contracted by the action of the fleshy portion of the arm. By these means the bones of the hand and arm, being incapable of shortening themselves otherwise than by bending their joints, that was done, of course, and the hand passed into the state in which I found the patient, because there was no power which would be applied to counteract the retraction of the flexor muscles of the hand, under the circumstances mentioned.

I find it will require too much time and space, at present, to give the full explanation the importance of the subject deserves, I therefore shall continue it, if you think it entitled to that attention.

T. SHELDRAKE.

No. 9, Upper Berkley Street,
Portman Square.

CHRONIC SCIATIC NEURALGIA.

INCREASE OF THE TESTICE BY IODINE.

By S. HOOD, A.B. M.D.

ALL the cases of neuralgia of the sacral nerves, which have come under my observation during the last twelve months, have been of the most inveterate description, and all of them accompanied with diseased testicles; the following one appears to me worthy of publication:—

December 12, 1831. Mr. Dean, No. 12, King's Road, aged 40, is wasted nearly to skin and bone, and is so weak that he can walk only with great difficulty; he complains of rheumatic pains in his joints, with neuralgia of both sciatic nerves, and spasms of the thighs and legs. He says he is in constant pain, which is much aggravated from four o'clock in the afternoon till the following morning, and compares his anguish to pouring boiling water on his limbs. I am at liberty to use his own words respecting death, but it is sufficient to say that its approach would have been considered by him as a blessing. The disease has lasted sixteen months, which he accounts for in the follow-

ing way :—" I am part proprietor of a pleasure boat, with some of my neighbours, and in the summer of 1830, while we were out at sea, a fowling piece went off accidentally, and shot my friend Mr. Scarnell in the throat, which horrified me so much that I have never been well since." He confesses, however, to have been exposed subsequently to cold and wet before the disease began.

Being desirous of giving constitutional treatment a fair trial in this case, I ordered a small blister on the lumbar vertebræ, to be kept open with savine ointment, and prescribed the subcarbonate of iron, with an occasional blue pill, without the slightest benefit. He then took arsenic till it caused derangement of vision and visceral symptoms, but the only advantage procured was the postponement of the accession of the fit from four o'clock till seven. He then took the sulphate of quinine to the extent of a scruple in the course of the day, but he did not keep the ground which had been gained by the use of arsenic, for the fit returned at its usual hour four o'clock. The arsenic was again taken and gradually increased, as far as safety permitted, but with no better success than before. Six weeks were consumed in the above treatment; the disease was scarcely mitigated, and the general health much worse than when it was begun. During the first month of this treatment he had concealed from me the disease of his testicles, one of which was withered and flabby, and the other hardened and twice its natural size, which increased rapidly under the constitutional treatment.

Conceiving it hopeless to do any thing for the sarcocele (except prescribing iodine ointment), while the patient continued to feel as if boiling water were poured on his limbs, I resolved to augment the positive galvanism of the sacral nerves by an application to the spine. With this view a very small eschar was made on the loins with nitrate of silver,

but owing to the twisted manner in which he lay on the sofa, it acted only on the right sciatic nerve, which was relieved at once. Eight days afterwards, in the presence of my friend Mr. Duncan, I made another small eschar over the left sciatic nerve, behind the great trochanter, which immediately removed the pain, and he hobbled about his room in an extacy of joy. I usually make neuralgic patients, whom I am compelled to treat in this manner, keep a measure of their legs, as it is a gratification to them to find their limbs growing like a vegetable. There had been no measure taken of the right leg in this case, but the left grew in circumference half an inch in one week, and besides the increase of size the muscles themselves, from being soft and flaccid, became hard and elastic. Before the neuralgia of the sciatic nerves had been relieved, the sarcocele was so much increased, and the spermatic cord so enlarged and hard, that Mr. Duncan pronounced an operation inadmissible; but the disease has at last yielded to a protracted use of iodine, both internally and externally. It was curious, in this case, to observe the right testicle gradually increasing in size, and reassuming its glandular character, while the left one was decreasing to its natural shape, and if the patient himself is to be credited, the functions of both are preserved. While the treatment of the sarcocele was going on, he had erratic neuralgic pains about the shins and sides of the legs, which were quite removed ultimately by the sulphate of quinine. In chronic neuralgia I have not been able to observe any benefit from counter-irritants, but the injury is often manifest enough, and is like adding the martyrdom of St. Anthony to the tortures of Tan-talus.

That acute neuralgia may be cured by constitutional treatment, without much detriment to a sarcocele, is certain, because Mr. Wigan has shown me a case of it; but in chronic neuralgia, more particularly when both

sciatic nerves are affected, the preparations of both iron and quinine seem injurious to the enlarged testicle, which can hardly be cured without removing the primitive disease. That constitutional treatment often fails in curing neuralgia, in the most skilful hands, is undeniable, from the number of invalids who frequent this place; and one objection to a complete reliance on it is, that commonly it is very tedious, and when it does eventually succeed, the constitution is sometimes left a complete wreck. Last autumn I saw a gentleman who had been twelve months under constitutional treatment for neuralgia of both sciatic nerves, but he survived the cure only ten weeks; both the testicles were so wasted and soft, that even had his health been restored, it is doubtful if their functions could ever have been performed.

That the positive animal galvanism of the sciatic nerves can easily be increased is certain; but the difficulty is to estimate the exact amount of the increase required in chronic neuralgia, for the following reason:—The action of the nerve ought to be raised sufficiently to cause a slight expansion of the small veins of the neurilemma, without increasing the calibre of its arteries, and the cessation of pain is instantaneous; but if the expansive power of the nerve be raised so high as to expand the arteries of the neurilemma also, the pain will be increased perhaps for twenty-four hours. I know well this is applying physiology with too great precision to the treatment of disease to meet with the slightest regard from rule-of-thumb practitioners; but usually they have the dread of fever before their eyes, and the free use of nitrate of silver on the spine produces fever. Provided the application be made right over the nerve, it can hardly be too small in chronic neuralgia; the largest in Mr. Dean's case might have been covered with the small end of a tailor's thimble.

King's Road, Brighton,
April 18th, 1832.

MR. WHITMORE,
ON THE
PATHOLOGY AND SUCCESSFUL
TREATMENT OF CHOLERA.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

So much has already been written on the subject of cholera, and moreover, as we have the most cheering prospect before us of the disease lessening in its devastating progress in the neighbourhood of London, I hardly know whether any communication upon the subject will be acceptable to you, at this, the eleventh hour; but, as I have never contributed towards this "unprofitable mass," and, indeed, as I have never till very lately had opportunities of watching the progress of the disease through its stages, I may, perhaps, hope to be forgiven for troubling you with a few observations upon the subject; the more so, as it is yet to be feared it may make some further ravages in different part of England, as well as on the Continent. First, then, I should say, we have in this disease, as on many other occasions, shewn too great a fondness for referring the existence of one symptom as being dependent upon, or caused by, the presence of another; in other words, of supposing that we have satisfactorily referred *effect* to its legitimate cause: thus, in cholera, the prostration of strength, the coldness of surface, the sunken countenance, the shrivelled and blueish condition of the extremities, are by far the greater number of persons, who have written upon the disease, referred to the diarrhoea, which, in the majority of cases, had existed for a longer or shorter period before those symptoms had manifested themselves. Now it must be evident, to the most superficial observer, that none of these last mentioned symptoms are at all proportioned, either to the length of time or to the severity with which diarrhoea had existed. Nay, as far as my own ob-

ervation has gone, those cases which have not been preceded by diarrhœa have more hastily run into a state of collapse, and that too of the most intractable and fatal kind. And again, we do not find that the subsidence of any of these symptoms is in any degree governed by the continuance or cessation of diarrhœa. Nor, in my mind, at least, are any of these symptoms any more dependent upon the co-existence of each other, than they are upon any symptom which may have preceded them. Here, then, we feel ourselves driven to look further-a-field for some *common* cause which may, and which is likely, to have produced this whole train of symptoms; and, this, I think, has been well explained by Dr. Stevens, late of St. Croix, as being entirely referrible to a certain condition of the blood of those people who become the subjects of this disease, that is, to the entire absence of any saline matter therein. This gentleman states, that he has been led to draw this conclusion from a careful analysis of the blood of cholera patients, and its great affinity to the chemical condition of that fluid in patients afflicted with the yellow fever of the West Indies, and which complaint that gentleman is said to have treated with unparalleled success, during the many years he was resident in that part of the world. But to be brief:—I have been led to the above remarks through having witnessed that gentleman's treatment in a very considerable number of cases which have occurred in a public establishment in this vicinity, as well as in several instances in my private practice, occurring in a neighbouring parish. I have avoided stating numbers, because I am aware that the treatment in some of the cases was commenced before the existence of some of the worst symptoms of cholera had manifested themselves; but, to a hackneyed observer, the presence of some two or three of the premonitory symptoms constitute a sufficient earnest of what a few hours will produce; and I think you will agree with me, that

it would be very cruel in *every* instance to wait for the arrival of fatal symptoms before any curative plan was pursued; though, by-the-by, I saw the treatment commenced in several instances after the stage of collapse had set in, with the happiest results. Suffice it to say, that the official returns to the Board of Health, for the above establishment, alludes only to sixteen cases, that is, twelve recoveries and four deaths. The twelve recoveries are those which were subjected to Dr. Stevens' plan of treatment; the others were subjected to the ordinary treatment in use before the doctor's plan was made known. It consists in introducing as much saline matter into the system as possible; to this end, he orders generally one of these powders to be taken every hour in beef tea, or half a tumbler of toast and water, until reaction takes place, and then to be continued at more distant intervals; viz. carbonate of soda, half a drachm; muriate of soda, a scruple; oxymuriate of potass, seven grains. If the stomach be very irritable, a sedlitz powder may precede the use of the above, or be introduced occasionally; a mustard poultice to be applied to the most painful parts; and an enema, composed of a large table spoonful of common salt, and two large table spoonful of sugar, to be administered in half a pint of water, as hot as it can be borne, the patient to be indulged with as much toast and water as he chooses to drink; a good fire to be kept in the room, with as great an interchange of air as can safely be effected.

I repeat, that it is an incontrovertible fact, that not a single instance of fatal termination has occurred in any case, either in my private practice, or in the House of Correction, where the above treatment was had recourse to, a fact which certainly cannot be too generally made public. Begging a thousand pardons for having occupied so much of your valuable columns, I am your's, &c.

HENRY WHITMORE.
Cold Bath Square, April 14, 1832.

EXTRACT FROM

RESOLUTIONS OF THE COURT OF
ASSISTANTS

OF THE

SOCIETY OF APOTHECARIES.

RESOLVED, That the Society's Garden at Chelsea be open every Wednesday during the months of May, June, July, August, and September, from nine o'clock in the morning until twelve at noon, and that admission be given to all such medical students as are pupils to the established professors and lectures in the metropolis, whether upon medicine, chemistry, materia medica, or botany, and also to the apprentices of the several members of the Society.

That there be every week a demonstration of the plants contained in that department of the garden appropriated to plants belonging to the materia medica, and of such other plants as the demonstrator may think proper; such demonstration to commence at ten o'clock punctually, and that after such demonstration is finished, there be a lecture delivered by the demonstrator in some part of the building attached to the garden, upon one or more of the following subjects, so as to form, during each summer season, a regular course of botanic study, namely:—

1. The different systems of botany, both natural and artificial, particularly those of Linnæus and Jussieu;
2. The structure and growth of plants;
3. The different parts of plants, with their descriptions and uses in the process of vegetation;
4. The natural and chymical analysis of vegetable matter;
5. The medical uses of the most important articles in the materia medica, with observations on the best modes of preparing them.

These remarks may be made either at the lectures or at the demonstrations, at the discretion of the lecturer.

That the conducting these demonstrations and lectures be committed to the Society's demonstrator of botany, and that the monthly lectures hitherto

delivered by him at the gardens be discontinued, as merging and more effectually provided for in the lectures now proposed to be adopted. That in order to give encouragement to diligence and talent, there be an annual examination of such students as may think proper to become candidates for the prizes intended to be given on these occasions. The examinations to be upon some or all of the subjects stated in the foregoing series of lectures, as well as upon their skill in the nomenclature of plants. No person to be admitted a candidate who has not attended these lectures and demonstrations at least eighteen days in one summer, or thirty days in two succeeding summers; nor shall any prize be awarded unless this examination be performed to the complete satisfaction of the examiner or examiners for the time being. To prevent partially or undue preference, no public professor or lecturer, whose pupils are admitted to the garden, can be appointed an examiner.

The apprentices to members of the Society, having an annual opportunity of being candidates for prizes upon the ancient establishment, cannot be admitted candidates on these occasions, either during the period of their apprenticeship, or subsequently to the conclusion of it. That two medals, the one being of gold, of ten guineas value, and the other of silver or bronze, be annually awarded to the two candidates, who shall have passed the best and second-best examination in manner hereinbefore mentioned, but no medal is to be given unless in the opinion of the examiner or examiners the candidates shall be deemed deserving of it. The beadle, or some proper person, is to attend at the garden on each day of admission, to receive the visitors, and to enter or cause their names and the names of their tutors to be entered regularly, in a book to be provided for that purpose, and also to note therein any misconduct or breach of established regulations which may come to his knowledge during such attendance, giving

information thereof to the master and wardens.

That the following be the regulations for the admission of students :—

“ It is intended that admission shall be given to all such medical students as are pupils to the established professors and lecturers in the metropolis, whether upon medicine, chemistry, materia medica, or botany; such students to apply at least three days prior at the beadle's office, in Apothecaries' Hall, for tickets of admission for that purpose, which the master and wardens will grant to such persons as they may think proper.

“ In order that the master and wardens may be enabled to exercise suitable discretion in granting such tickets, each student must leave with the beadle a letter of recommendation from his tutor (!), stating that such student has been attentive to his studies, and is, in his opinion, desirous of improving himself in the science of medical botany.

“ That a ticket be given to each student, and that such ticket be renewed annually.”

By order,

EDMOND BACOT, Clerk.

Apothecaries' Hall,

Feb. 1st, 1832.

Royal College of Surgeons.

LECTURES

ON THE

ANATOMY AND DISEASES OF THE EYE,

DELIVERED BY

G. J. GUTHRIE, Esq., F.R.S., V.P.R.C.S.

Lecture the Twelfth.

MR. PRESIDENT,

I HAVE NOW to consider the inflammations to which the iris is liable. Hitherto I have disagreed with oculistic writers only on the treatment, I must now, I fear, differ with them in regard to some of the symptoms generally.

The iris is a membrane stretching across the anterior part of the eye, posterior to the cornea, with a hole in the centre called the pupil, which it has the power of contracting and dilating, so as to admit only a certain quantity of light. The iris is not quite a perfect plane, although it appears to be so; it contracts and dilates in a certain line, as a door moves in a groove, with great celerity and precision, and without the slightest vibration. If this proceeding is not attended to in health, we shall not know when the iris is diseased. When I am speaking of contraction and dilatation, it will be in relation to the pupil, and not to the expansion and contraction of the iris, in the sense in which these words are used by the Germans. The pupil is capable of being dilated to a very great extent, especially when under the influence of fear, rather than of joy, and this more frequently in young persons. This dilatation can be made to take place by the external application of narcotics; such as the belladonna and hyosciamus, which are most frequently put in requisition for this purpose, and occasionally, but very rarely, the stramonium. The active principles of these two plants are to be had recourse to when the pupil does not obey the action of the vegetable itself; and it is frequently of great importance to be able to effect this object.

Besides common inflammation, the iris is also subject to some of a specific character. The first, and most common, is the syphilitic; some authors also notice a pseudo-syphilitic. The next is the rheumatic, to which the Germans add another, which they call arthritic; but this is more an affection of the eye generally than of the iris in particular. Scrophulous inflammation is, I believe, always an extension of the disease. Inflammation of the iris is technically called *iritis*.

One eye only may be affected, or as one eye is getting well the other

may be attacked; or they may be inflamed alternately or together: it is scarcely necessary to add, that the inflammation may be either acute, subacute, passive, or chronic.

Symptoms of the acute inflammation.

—When the iris is in its natural state, the clear, distinct, and defined edge of the pupil may be seen with a black circle around it, in persons having blue eyes, owing to the uvea advancing a little beyond the true iris, and this is more evident when the patient is affected with a soft cataract. It has been presumed, that as the iris is supplied with blood by the long ciliary arteries, it may be inflamed without any other part being similarly affected. I hold this to be a mistake; the sclerotica is very generally implicated; the cornea and aqueous humour are both deficient in transparency; and, as the disease advances, the capsule of the crystalline also inflames. I believe that it is only affected alone in its very first stage. When the iris is inflamed the first symptom is, generally, a change of colour. The iris can carry a certain quantity of blood with impunity, and can distribute it properly; but when the quantity is increased it changes its colour, the blue eye becomes green, the dark eye brown, or even blood-red, like the eye of the black-cock. The iris also loses the peculiar characteristic defined edge which I have alluded to; it is not thicker nor rounder, but is not so clearly nor so well defined as before, and it is probably drawn a little backwards. The circle of blood-vessels surrounding the pupil becomes slightly prominent, and there is generally a little deposition on this part, like the fur on the tongue, so that I usually say, the edge of the iris is a little furred; it has occasionally patches of lymph on it. When the iris has lost its defined edge, it is anormal, it is diseased, and has lost, more or less, of its power of motion; it is not necessary that it should all be diseased at once, and hence one part of the iris may

act, while other parts remain fixed. One reason why a part remains fixed is, because the fibres become so attached or agglutinated together as not to be able to act, and this immobility takes place in the first stage. It may also occur from the attachment of the posterior part of the iris to the part immediately behind; if the adhesion takes place near the pupil, it will be attached to the crystalline lens; if more outwardly, to some of the ciliary processes. There is a great deal of difference in regard to the nature of this adhesion. In syphilitic iritis the adhesions can be readily overcome, even up to a late period, which is not the case in the rheumatic, the adhesions being probably of a different kind, which it is important to know with reference to the prognosis.

You are all aware of Mr. Hunter's experiments in regard to inflammation. You know that he inserted a tooth into a cock's comb, with success, and a cock's testicle into a hen's belly, and that it adhered, although I never heard that it did any good there—(*A laugh*). Now in these experiments it is evident that the adhesive inflammation must have been on one side only, and it has therefore been said that the iris adheres to the crystalline lens by the inflammation taking place solely in the iris, but I do not believe that this is the fact; the capsule of the lens generally becomes inflamed when the disease has gone so far as to give rise to such a result. When the belladonna is applied, part of the pupil dilates, other parts remained fixed, and thus, what is termed angularity, or irregularity of the pupil takes place. If the capsule of the lens does not become very much inflamed it remains nearly transparent, but if so, it is rendered opaque in spots, or in totality. When the inflammation is severe the pupil will be contracted even to a central point, and it may be almost completely closed.

All the inflammations of the iris (except the rheumatic) are exceedingly

prone to the effusion of lymph, which is thrown out not only on the surface of the iris, but into the pupil, filling it up, and falling from it into the anterior chamber; the inflammation readily spreads to the cornea, giving rise to spots on it also. In simple iritis there is seldom any considerable quantity effused into the anterior chamber, and very rarely in the rheumatic, while it is very common in the syphilitic. This latter inflammation seldom lasts a few days before there are large tubercles of lymph on one or more parts of the iris, as well as on the edge of the pupil.

There are external symptoms in all cases of iritis. There is a peculiar redness termed the zone, consisting of vessels running from the circumference in straight lines, enlarging as they advance, but not reaching quite to the cornea, leaving, in some instances, a white circle between them and the cornea. They are not the vessels supplying the cornea, but those of the ciliary ligaments, which pierce the sclerotica at that part. In common and syphilitic iritis these vessels advance very close upon the cornea, and the inner white zone is scarcely visible; but in the arthritic or gouty rheumatic inflammations, both the white and red zones are very evident. This peculiarity also marks the disease called glaucoma, a complaint which in this country frequently takes the place of the arthritic iritis of the Germans. This zone of redness is not peculiar to iritis, but takes place in inflammations of the cornea, sclerotica, the choroid and the ciliary processes, as well as of the iris. The pain differs in extent. In a chronic case there is comparatively very little. Those who work with one eye steadily fixed for some time, are subject to this chronic state, but suffer very little pain: the vision is imperfect, and there is a sense of weight and uneasiness in the eye. This chronic state of the eye is peculiarly the disease of women at a certain period of life. There are few women at the age of forty-eight, just when the ca-

tamenia are disappearing, who have not experienced the preceding sensations; and I may be permitted to remark, incidentally, that emetics, preceded by a moderate bleeding, are of great advantage in relieving it. There is great pain in the acute inflammation, and it is the circumorbital pain. Whenever the internal parts of the eye are inflamed, there is always pain in the course of the fifth pair of nerves; in the rheumatic inflammation it is perhaps worse than in the syphilitic. In the gouty rheumatic inflammation, which attacks persons at fifty, the pain is intolerably severe, so as scarcely to be borne. The pain in all fibrous structures is increased at night by paroxysm, but I have already said that this is not a proof of the disease being of a syphilitic origin.

The inflammation is not generally severe, as far as regards the conjunctiva; there is not very great lachrymation, nor intolerance of light, except in the rheumatic; but there is always defective sight, and sometimes a total loss of vision, even when the cornea and aqueous humour are sufficiently transparent.

General means of cure.—I shall confine myself for the present solely to the acute stage, in which the patient should always lose blood, either from the arm, from the temple, or from behind the ears. In regard to cupping on the temple, when the fifth pair of nerves is affected, or in chronic disease of the eye, I think it is not desirable, as a severe pain often follows, and frequently exists for some time after, which is always attributed to the cupping. When I first heard this said, I did not believe it, but it occurred so frequently that I could not help perceiving that there was some connexion between them, and as cupping behind the ears will do as well, it will be better to do it there, except in pure cases of common or syphilitic iritis, when there is not so much objection to cup on the temple. In case of common inflammation you should bleed largely,

and give tartar emetic with the sulphate of magnesia, so as to vomit and purge freely, which, with the application of belladonna, will frequently effect a cure; but in the specific inflammations, it is very rare that you will be able to do so by this treatment only. If the pupil does not obey the belladonna and the pain continues, you must repeat your remedies, and if without benefit, you must then have recourse to other measures. The first and most important of these is mercury, which may be used in all cases of iritis. There are two or three ways of administering it; it may be rubbed in in various parts of the body, and on the forehead, mixed with opium, to relieve pain, whilst it is also to be given internally; two grains of calomel and a quarter of a grain of opium for a dose, according to the times it is to be repeated; if only three or four times a day, then half a grain of opium will be a proper dose; if every four hours, day and night, then one-third grain, but if every two hours, a quarter grain will, in all probability, be sufficient, but the dose of opium should be increased at night, just before the accession of pain is expected; but the severity of the disease must regulate the doses of the medicines. Sleep must be procured if possible by opium, and the full effect of mercury is necessary to effect a cure. I mean a complete pytalism should be induced, and more especially if any adhesions have taken place. I am no advocate for producing the full effects of mercury generally, but here if you wish to cure your patient, or prevent a relapse, you must cause pytalism.

It has been said, that the administration of mercury will cause iritis; I do not believe it; I have given it very largely in many diseases, and cannot recollect a single case in which iritis took place from its use. I have seen one eye get well by mercury and the other eye become inflamed, while the system was under its influence, and cured by a repetition of

the remedy, but this cannot, I think, be fairly attributed to the mercury.

The oleum terebinthinæ is a remedy of great power in inflammation of the iris, as well as in inflammation of serous membranes generally. Its efficacy in rheumatism has been long known, and I have tried it frequently in those cases of iritis which are supposed to be complicated with rheumatism, with the best effect. Its powers are not, however, confined to these cases alone; it exercises great influence over those which are clearly syphilitic, and of course over all other inflammations of this part from whatever cause they may arise. It is not equal, nevertheless, to mercury, although, perhaps, it takes the second place. It is less certain in its effect, and requires a longer time to produce it; is very disagreeable to swallow, and cannot be borne by some stomachs, giving rise occasionally to constant vomiting, or to a regurgitation and nausea not less distressing. I usually give a drachm for a dose every six hours, hoping that its effects on the kidneys, bladder, and urethra will soon become apparent from the increased quantity of urine secreted, and the more frequent and painful desire to make it. This is sometimes very great, when the urine often becomes tinged with blood and creates a little alarm. These symptoms soon subside on omitting the medicine, and taking linseed tea and camphor mixture frequently, with small doses of opium. I have never seen any bad effects result from its use, but I have heard of persons making bloody urine for a long time afterwards. It is, therefore, necessary to watch and to desist from giving it as soon as the tinge of blood is perceived, if the other symptoms have not rendered it desirable to do so before. It is proper, however, to bear in mind, that little good will be done unless the full effect is produced on the urinary organs. I have been sometimes obliged to give two drachms every four hours to do this, and then it is apt to run off by the bowels. In other cases

it affects the head, and gives rise to sensations allied to that accompanying delirium, when it must be abandoned; or indeed if it appears to be doing little good, whilst it causes uneasiness in the stomach, general irritation, and fever.

The great utility of turpentine, as a remedy in this disease, occurs from its being able to take the place of mercury in cases in which mercury disagrees, or in which it has been given with bad effect; or in persons whose constitutions have been so broken down by its use, that nothing but the absence of other means could induce us to have recourse to it. In all these cases the *ilium terebinthinæ* is an invaluable remedy. Many people can take it mixed with a little yolk of egg, almond emulsion, and lavender, as Mr. Hugh Carmichael recommends; others find it more palatable in peppermint-water; and I believe it is best given in the least quantity of any kind of medicine which is the most agreeable to the patient. I have never seen it exercise an influence greater than that of mercury, although I have seen mercury effect a cure when the turpentine has failed.

The *colchicum* is a remedy I have great confidence in also; but not in syphilitic cases. I use the wine of the root in drachm doses, with a few grains of magnesia, repeated every six or eight hours, until the usual effect is produced; and, like mercury and turpentine, the full effect must take place or little good will be done. It is most applicable in rheumatic cases, or in those in which relapses are frequent from exposure. I have usually given it in these cases, combined with bark and quinine, the latter of which can hardly be depended on alone at the present moment, when it is so much adulterated. I have rarely depended on bark alone, except in cases where the alternation of rheumatic inflammation of other parts with the *iritis* has been so well marked as to leave no doubt of the connexion between them.

THE
London Medical & Surgical Journal.

April 28, 1832.

“Men, that make
Envy and crooked malice nourishment,
Dare bite the best.”

“WHAT then is to be said of those persons, while they know better, and are not unconscious of the miseries thus produced, attempt, either by writing or speaking, to perpetuate a state of things so prejudicial to professional character, and so baneful to the public interests.” Such is the pathetic language of a worthy contemporary, who never, in the whole course of his editorial life, penned a syllable prejudicial to professional character, such as the following classic and polite epithets:—“Bats, dubs, pures, vampires, hogs, cock-sparrows, neveys, noodles, rascals, scoundrels,” &c. Stand forth all of ye, physicians and surgeons of eminence, to whom such terms have been applied, attest the fact and proclaim it both in Gath and Ascalon—stand forth Sir Astley Cooper, Sir Henry Hallford, Sir Charles Bell, shade of Abernethy, J. Johnson, Guthrie, B. Cooper, Pettigrew, Stanley, Tyrrell, Travers, Key, Vincent, Earle, Keate, Joberns, Mayo, Hewitt, &c. &c.—stand forth every physician and surgeon in London, who have been honoured by the scurrilous abuse of the writer of the above passage, and testify to the world who has committed this outrage on professional character.

This feeling effusion was elicited

by our extracting from a Parliamentary paper, a detailed account of the sums paid to the members of the Central Board of Health, to which we added the following comment—"This document offers ample evidence of the real motives which have influenced the Central Board of Health. After its perusal, no one can mistake the reason which led to the promulgation of the terrific promulgations on the contagiousness of cholera." A libel! exclaimeth our immaculate moralist. What a vast discovery, and by one too who is so profoundly versed in the law of libel! Prodigious! We beg to inquire, has not every independent newspaper in the kingdom, published and republished the said libel, "times out of number," during the last three months? This discovery is made much too late. Now, suppose we accused the Board of venality, which we have not done, we were not the first who made the accusation; nor were the members of this body the only obnoxious persons to such a charge, for we believe it has been made against mankind in all ages and countries.

"Nummus est anima et lætitia mortalium."

"We did not believe," continues our honourable contemporary, "that such a traitor to the cause of professional respectability existed in its ranks as the writer of this black, foul-tongued, cowardly insinuation." Horrible, most horrible! that there could be found journalists independent and honest enough to guide the public press, vile and corrupt as it is, as designated by another medical contem-

porary, in exposing the crooked policy of the Boards of Health, and in allaying groundless alarm, and disabusing the public mind of exaggerated terrors. The alarmists being defeated, their rage is boundless towards us, but it is quite harmless.

"Quis furor, O cives, quæ tanta licentia ferri;" or, in the vernacular tongue, "What rage, O citizens, what havoc of the *Lancet*." It is come to this, that "such vile slander should be vomited forth, (and we withhold the author) by some lying, intriguing, deceitful, cozening knave; that it was published by thy kindred association of physicians and surgeons (an association judging from appearance (!) about upon a par with, in point of talent, the Umbrella Company) (most assuredly, "neither Prouts nor O'Shaughnessys) without the privity and concurrence or prepare for smothering in thy own filthy repository." What a splendid illustration of the atrocious enormity of writing what is prejudicial to professional character! What a powerful proof of the writer's notions of the etiquette due to the profession!

"At all events," concludes our polished contemporary, "concerning Michael's future fate (our colleague's) we strongly suspect that, if he cannot in the most unqualified manner disclaim this libel, the whole profession will disclaim *him*—(Eh! for love of the Board is it?)—as being a man who would not scruple to blast the reputation of the entire medical character of the country—(Oh ye gods and goddesses! the Central Board, the medical character

of the country !)—or impute the most unworthy motives to his brother practitioners, if by so doing he could gratify his own feelings, or serve his own ends. So pray look to it MICHAEL RYAN; the injunction is offered in no unfriendly voice!" With what justice does our contemporary accuse us of blasting the entire medical character of the country? In reply we beg to ask, have we to gratify our own feelings, to serve our own ends, blasted and degraded the medical character, either individually or collectively? Have we used every effort to degrade the greatest ornaments of our profession, in order to elevate a certain class of the faculty, and to serve our own ends by increasing the number of our subscribers? Have we ever outraged common decency in our attacks upon professional character? Never! never!—we would perish in a garret first: "*Qui alterum inculcat probri, ipsum se intueri oportet;*" or, in a free translation, those who live in glass houses, &c. Have we ever libelled professional character? Never, except in one supposed instance, into which we were led by condensing and expunging the most stinging part of an article from the spotless pages of our contemporary, and which will, ere long, come before the world, entitled, *Ramadge, v. Wakley, Ryan, and others*. Had the profession disclaimed all those who have defamed the entire medical character of the country, doubtless our contemporary should be excepted.

It is quite absurd to consider Sir

William Russell and Sir David Barry, whose names only appear as the medical officers of the Board of Health, as "the profession of this country." The truth is, that the Board was an excrescence springing upon the faculty in this kingdom; and we are satisfied that there is not an eminent physician or surgeon in London who considers it the profession of the country, or who is not ashamed of its conduct. The assertion, therefore, that in censuring this body we have injured the faculties of physicians and surgeons in Great Britain and Ireland, is silly and ridiculous. On the contrary, we are still, and have been, ardently devoted to the cause of the whole profession; we have maintained its character and dignity on every occasion; and we laugh contemptuously at the gratuitous and groundless insinuations of our opponent. We know the value of professional character too well to attempt to depreciate it, and we shall never degrade it either by speaking or writing, or by personal conduct. Our lives, our days, our hours have been, and are still, passed in communion with our professional brethren; and we value the noble science of medicine too highly to defame its cultivators.

But, on the other hand, have they not seen, within the last few years, the sacred engine of civilization—the source of all those happy influences by which the social condition of man has been ameliorated, elevated, and dignified—have they not seen the glorious PRESS perverted by members of the faculty, into an instrument of unmix-

ed calumny, and rendered subservient to the gratification of the lowest of human passions? Have they not witnessed the discord, the civil strife, the war of brother against brother,—which have been produced in the great community of the medical profession by the wanton abuse of the power of the press? Has not the judgment-seat of medical criticism been foully corrupted—not indeed by gold and silver, but by the far more potent agency of a jealous, an unforgiving, and an unprincipled spirit? Is it not known to our readers, that able, amiable, and virtuous members of our profession, have been dragged forth from that modest retirement of domestic life, which hitherto used to be respected as inviolable, to answer charges which never had an existence, save in the wanton imagination of their accuser? Who amongst us is ignorant that some of the brightest of the living ornaments of our profession—men whose genius and industry will be known to posterity in many an important and useful result,—have seen their names associated with terms of ignominy and reproach, such as the vocabulary of Billingsgate could scarcely parallel?

Have we done this mischief?—Have we filled the pages of this Journal with every opprobrious epithet our language affords, and applied them to the hospital physicians and surgeons of London? Was this course calculated to inspire students with that respect they owe their calumniated teachers? Or was it proper for the edification and instruction of “the tag, rag, and bob-tail,” who frequent

coffee-rooms and taverns of the metropolis, where they once might peruse our contemporary, and sit in judgment upon the abilities of the first physicians and surgeons of this country? Was this the way to elevate professional character? In our turn we call upon the author of this scandalous conduct to stand forth and answer these queries, or else the profession will disclaim him.

The motives which excited the ire of our contemporary are simply these, that we have immortalised the Central Board of Health, its dependants, its supporters, including both our hebdomadal opponents, and have given all a *coup de grace*. We have spoken daggers to them, but used none; and we were aided by the whole public, and nearly the whole of the profession, and we now triumph in our glorious victory. If the Central and other Official Boards of Health had acted agreeably to the institutes of medical ethics, had treated the profession as they should have done, they would have found us their strongest advocates and supporters; but their whole conduct was so unprofessional, so equivocal, so mysterious, so ridiculous, so insolent, and so tyrannical, that it excited the sovereign contempt and scorn of every enlightened member of the faculty. Did not the Central Board insult the faculty by their absurd and insolent behaviour? Did they not report and fabricate cases of cholera that never existed? Were not these cases denied in the public papers over and over again by the resi-

dent medical men in the places from which they were reported? Had we not the fictitious cases from Mary-le-bone workhouse, and from James's-street, Hanover-square, and from a hundred other places, together with all the cases "in anywiselike cholera?" Had we not Boards of Health forced upon the people, without necessity; quarantine enforced—millions beggared—all, all by this worthy Board of Health? We have no desire to revive their melancholy and disgraceful history, we look upon it "more in pity than in anger;" we esteem it the greatest degradation the "entire medical character of this country" has sustained during the present century. The faculty was hated, detested, despised, and loathed during the late epidemic; the very urchins in the streets shouted the words cholera, and the doctors, as terms of reproach. This state of things was induced by the faults, the vanity, and the errors of the Board, which will serve as so many beacons to warn the profession in future against the quicksands which have wrecked their spurious precursors. Our object was to admonish, not to sting—to correct errors, and point out the way in which this body ought to have acted. It is madness to defend the conduct of the Board. But most unfortunately our contemporaries, sharers in the disgrace, now rave like fools or maniacs, and foolishly suppose, by vulgar personality towards the Association of Physicians and Surgeons, and towards us, to raise a laugh. Poor ideots! who

would now listen with attention to their defence of the Board and themselves? Who, we ask, would feel a pang if they were all consigned to the regions of oblivion? We pity them. Their tocsin of alarm was stifled by us, and hence the cause of the specimens of low vulgarity in the pages of both our contemporaries.

The fact is, our praises have been awarded by the public press—our honesty and science have been duly appreciated—we have become as popular with the profession as with the public, and hence the ire of our defeated and derided contemporaries. The greatest bibliopoles, the monarchs of the Row, have, as the publishers of a stupid contemporary, given us every opposition. Even our valorous opponent of the scalpel shews his hostility, because we are patronised by every enlightened member of the profession, and by every zealous student, who estimate pure science and manly independence, and who disregard and despise the petty, paltry interests of rival editors, proprietors, and publishers. In further proof of the correctness of this assertion, we may state, that our very moralist has said, on a late occasion, "that d—d new Journal is cutting the throats of *The Lancet* and *Gazette* (as to the latter, it was so wooden-headed, it was nothing). Only think of its being published at SIXPENCE!" Yes, it is, and will always be published at sixpence, and will not impose shilling numbers upon its friends, nor fill its pages with farriery and cattle medicine, but with pure medical science. Its pages are

not in want of medical lectures, as they are, and always will be, filled with the contributions of the first teachers in existence. They need no veterinary medicine, however interesting in itself, as they are intended for the faculty, and not for

“ Cow or horse-leeches.”

There was a time when a contemporary was considered almost infallible, quite invincible, nearly omnipotent; but that time has gone by, never to return. How have the mighty fallen! and so will every member of the profession who, by writing or speaking, defames and degrades the entire medical character of the country. Such a man is and will be disclaimed by every respectable member of the profession. He may have a few satellites among the hungry aspirants to place, and the members of the Umbrella Company, but none others.

Another of our contemporaries has been labouring to sneer at the French, for not pronouncing cholera contagious, and, in passing, he aims a blow at certain sagacious journalists, in this country, who lauded the Parisian faculty for their scientific conclusions. This worthy has also idiotised the Edinburgh faculty for arriving at the same conclusions, and wiseacre as he is, he bestows the gentlemanly epithet of “fools” upon our innocent heads. Here is another disciple of that school of critics, which Southey was wont to call the Sata-*n*ic, who attacks professional character. But this veriest of Solomons does not stop here, for he announces

to his few readers the following universally interesting piece of intelligence:—“*Spurious Lectures.*—Several gentlemen have addressed us on the subject of a somewhat novel and vexatious kind of nuisance (!!) to which they have lately been exposed, namely, that of being represented as contributing to a contemporary Journal (*aye, there's the rub*), with which they have no connexion whatever, directly or indirectly (a palpable falsehood, good Sir), The productions attributed to them are versions of their lectures (generally corrected by themselves), so much garbled, and so exceedingly incorrect, as to render it difficult for them to recognize their own property, except by seeing their names prefixed!! (Mighty like a whale, Polonius.) One gentleman informs us, that in the space of only two pages, professing to contain a lecture of his, there were not fewer than twenty-nine essential errors.” Now, reader, in reply, we beg to state, that we can scarcely suppose that the gentleman alluded to in the last sentence is capable of acting so base a part as represented by our veracious contemporary. The facts were simply these, that a certain lecturer sent us a copy of one of his lectures, in his own hand-writing, and a production so cacographical we have never before or since beheld. The printer's proof of it was one mass of error; it was corrected, and sent to the author, and changed by him as he thought proper; several new phrases and sentences introduced, the punctuation changed; and though

every alteration which was legible was attended to, the writer sent us the copy, when printed, complaining that all his corrections, especially his changes of punctuation, were not made. Instead of twenty-nine, there were not three essential errors; and if any one ought to complain, we should be the individuals, for we were put to more trouble and expense with this lecture than with fifty others.

"The proceeding complained of," continues our veracious contemporary of the joint-stock company concern, "is consummately impudent to be sure (there's for us), but we believe there is no remedy in law. The very curtailing and mutilation of the lectures, which deprives them of all value, likewise rendering it impossible to prove the degree of resemblance to those delivered, which is necessary in a court of justice." What a profound lawyer is this Solomon. So that a journalist may, according to him, ascribe to a lecturer opinions that are not his. This writer is certainly as innocent of all knowledge of the law, as he is of candour or of veracity as an opponent. But more of him anon. "On the other hand, we warn our correspondents that nothing would serve the purpose of the parties so much as an action against them, which they think might possibly give them a little of the notoriety they stand so much in need of." This, we suppose, is a hint for Professor Green, but we are sure, from that gentleman's waywardness of temper, it will be thrown away upon him. "Two circumstances

ought to prevent our correspondents from taking any trouble about the matter:—first, that a little patience will rid them of the grievance; and secondly, while very few ever see the lucubrations attributed to them, fewer still are so ignorant as to believe they really uttered the trash which is put into their mouths." The meaning of the last sentence is too obvious to require elucidation, but lest any of our readers should not comprehend it, in consequence of the confused style in which it is indited, we will give an explanation. The fact is, our contemporary has discovered, by woeful experience, that the profession have abandoned him, and left his lethargic and inane lucubrations to moulder on the publishers' shelves; and have joined our ranks.

Nothing but the impudence and effrontery of the man could warrant him in applying the word trash to any medical production in existence, save his own. The truth is we have ruined his vocation, we have estranged his supporters; and now, as he has had the temerity to attack us, we shall expose his real position. Know then, reader, that the joint-stock concern company have had a meeting a few days ago to take into consideration the propriety of renewing their subscriptions for another volume. Doleful were the statements, that our Journal had succeeded beyond any periodical ever published; and as it was so much more spirited than their poor paralytic bantling they thought it folly to go on. All our good qualities were

reluctantly admitted, and after several most melancholy reflections were made, and many speeches delivered, all which are in our possession, it was determined to go on until next October, in order to conclude Dr. Elliotson's Lectures; but no longer than that period would the present subscribers contribute "the sinews of war." It was said, that Dr. Elliotson's Lectures would ensure a sale so long; but as, doubtless, the new Journal would publish consecutive courses of lectures from October, it was useless to contend with a periodical which gave more and much better matter for a smaller price. If our contemporary has any fancy, we shall favour him with further remarks upon this subject. He has talked of curtailings and mutilations of lectures; but let him look to the puerilities and nonsense in the lectures in his own pages before he sneers at us for expunging such nonsensical *ad captanda* effusions. Let him also bear in mind, that we give three substantial lectures to his one.

We should, perhaps, apologize to our readers for the foregoing remarks, which some may think too personal; but, surely, it would be beyond human patience, to allow such provocation as excited them to pass unresented. Of one thing our friends may be certain, that we shall never descend to that blackguardism evinced by others. To those obnoxious to this charge, we say,

"You shall, in fine, by us unnoticed go,
As grass escapes the scythe, by being low."

CHOLERA IN PARIS.

[From our Special Correspondent.]

"Paris, April 22.

"THE cholera is fast subsiding here, but it is breaking out with the greatest violence in other parts of France. The whole history of the disease in this country demonstrates that it is nothing more than an epidemic, and this you will be more readily disposed to believe, when you hear that the cholera has been most fatal in that particular month of the year when the mortality of Paris is always greatest. The disease has broken out in too many places where no possibility could exist of its being carried there, to allow of the notion of its being contagious.

"There is one peculiarity to be noticed in the ravages of this epidemic in Paris, that is, the comparatively small number of children who have been affected by it. At the Hotel-Dieu were all manner of patients, without exception of age, sex, condition, &c., and there were only sixteen children out of 2,000 patients brought in. Of these, ten were boys and six girls, and of the sixteen two only were of the age of five or six years. At the *Hôpital des Enfants*, during eighteen days, no more than eighty-seven children were presented; but they were very badly affected by the disease, and forty-three out of the above number fell victims to the malady. The youngest children were those principally to whom it proved most fatal; those under four or five years of age rarely escaping. It is a

curious fact, that though the number of boys brought into the Hotel-Dieu very nearly doubled that of the girls, yet that at the *Hôpital des Enfants* the number of girls was greatest. Of the eighty-seven just spoken of forty-seven were girls. The average age of the whole of those children may be estimated at from eight to twelve years: three or four only had arrived at fourteen or sixteen years.

“The benevolent feelings which have been evinced, during the last month, by every order and class in Paris, are justly the theme of universal applause; but the charitable conduct of the medical men, from the oldest practitioners to the student of one season’s standing, cannot be adequately described by any language that I could use. As I perceive that your Journal takes a peculiar interest in the affairs of medical pupils, I will give you one or two anecdotes relating to some of my French fellow-students.

“When the cholera first broke out a number of temporary hospitals was made ready. One of these asylums was provided near the hospital for old women, and in an instant all the intern pupils of this institution set down their names as ready to take active service. The words are, ‘à prendre du service actif à l’hôpital.’ As soon as the arrangements were completed, and that the names of the attendants were formally enrolled by the Council General of the Hospitals, the students, who had received a hint that Government would make them some compensation, drew

up an address to the Council, in which they state,—

“ ‘In order that the Council may be under no mistake as to their intentions, the undersigned have the honour of making it known that it is their fixed determination to accept of no remuneration for the services which they temporarily give. In a period of public calamity, like the present, the pupils feel it to be a distinguished honour to have been among the first to come forward with a tender of their services in the cause of humanity.’—[What will those who receive 50*l.* and 60*l.* a month in this happy country, say to this noble disinterestedness?—EDS.]

“The horrible impression that the Government intends to poison the people has reached the country parts. At Nevers the following extraordinary occurrence took place. A medical student, fond of botany, was seen walking on the bank of a river which runs through Nevers, and occasionally stooping to pick up a plant in or near the river. A man came up and accosted him:—‘You are washing your hands in the river, Sir,’ said he, ‘Yes, my friend, I am,’ replied the student. With that, the stranger made a signal, when a fellow with a pair of mastiffs appeared, and in an instant the dogs were set upon the youth. It was only by the most extraordinary exertions that he was able to escape the fury of his assailants. He however got off without any serious injury.”

Hospital Reports.

WESTMINSTER HOSPITAL.

DISEASED WRIST—AMPUTATION.

JOHN WEST, aged 31, a coal-heaver, of middle stature and nervous temperament, was admitted on March 14, 1832, with disease of the right wrist. He was an in-patient of the hospital some time previous for the same affection, under Mr. White, and when he left the joint was considerably better, but it has been gradually getting worse ever since. The wrist is much swollen and tense, with an evident sense of fluctuation. On moving the hand up and down the bones can be felt grating on each other. There is an ulceration on the inner side of the hand, very little below the joint itself. The arm and fore-arm of that side are considerably attenuated. He states that the disease commenced about 18 or 19 months ago, with a swelling of the joint, but that he cannot attribute it to any known cause, unless it were a piece of coal falling on it, which happened about a month previous to the commencement of the disease.

Saturday the 24th. A consultation was held to-day between Mr. Lynn sen., Sir A. Carlisle, and Mr. Lynn jun., as to the propriety of removing the limb, which was finally decided on, as it was very unlikely that the hand could ever be serviceable to him. The man himself was resolute to have the operation performed, and accordingly preparations were made for its due performance. Considerable time was spent in arranging the tourniquet (the only one belonging to the Hospital!!!) which was at last got ready, and fixed on the patient's arm. Sir Anthony, at this stage of the proceeding, informed the poor fellow, that this application was only to stop the blood, "*something like grace before meat.*" He further assured him for his comfort, "that one-half of what was to be cut was insensible;"

and concluded his consolatory harangue by saying, "that the *bones, fat, and leaders, or as we call them in our slang!—tendons, are senseless.*" The tourniquet having been properly fixed at last, the circular operation was performed by Mr. Lynn, jun. The operator, we observed, followed the old and now nearly-abandoned practice of scraping the periosteum. The amputation itself was done in about two minutes, and a very good stump was subsequently formed; three ligatures were applied in about five minutes more, and dressing the stump required another five. The patient bore the operation with remarkable fortitude.

On examining the wrist afterwards, it was found that the bones and cartilages, more especially of the carpal extremity, were considerably diseased. Sir A. Carlisle seemed inclined to speculate upon the probability of amputation at the wrist being applicable to this case, but he did not appear to be borne out by any other surgeon.

26th. Cold lotions have been continuously applied to the limb. Says that he is easy, and passed a better night than he has done for some time. Full diet.

27th. The dressings have been removed to-day. The wound has healed by the first intention to nearly its whole extent. The patient is doing well.

April 7th. Two of the ligatures were drawn away to-day with some difficulty, fourteen days after the operation. He is going on well, and gaining flesh.

14th. The third ligature has come away to-day; the wound has nearly healed.

ST. GEORGE'S HOSPITAL.

REMOVAL OF A TUMOUR FROM THE MAMMA.

On Saturday, the 3rd of March, Mr. Babington cut out a small encysted tumour from a female breast, which Mr. Brodie, who is naturally a

very *lean* man, first mistook for a *fatty* tumour. Mr. Babington was of opinion that the tumour was of the same texture and structure as the breast itself, and on cutting it open this opinion was found to be correct. And we take this opportunity of stating, that, ever since his election as surgeon to the hospital, Mr. Babington has behaved, both to pupil and patient, in the most urbane and gentlemanly manner.

REMOVAL OF THE LOWER JAW.

On Monday, the 5th of March, Mr. Brodie performed the operation of amputating a portion of the lower jaw. 12 minutes and 30 seconds elapsed from the time that Mr. Brodie made his first incision until the portion of the jaw was removed; and twenty minutes more were occupied in securing the different bleeding vessels. The edges of the wound were brought together by interrupted sutures.

After the operation Mr. Brodie remarked, that the patient had laboured under the disease for which the operation had been performed (fungus), for upwards of a twelvemonth, and that it would have been performed some weeks before, when the disease was not so far advanced, and he would have been able to bear the operation better; but at that time he was seized with inflammation of the pharynx and larynx, from which he had now quite recovered; and his general health being very good, he (Mr. B.) had thought it best not to postpone the performance of the operation any longer. That portion of the jaw which had been amputated, extended from near the symphysis to the middle of the ascending ramus of the bone on the distal side. Previous to the operation he had debated, in his own mind, whether he should take off the bone at the articulation, or leave a portion of the descending ramus. He had decided upon following the latter course, as it would most probably form a better point of attachment for the ligament which

would run from one divided end of the bone to the other, uniting them in the same way as in fracture of the patella, and thus rendering the case of amputation of the lower jaw not such a desperate one to the patient as it was in general supposed to be.

The man has *gone on extremely well, without a single bad symptom*, with the exception of a slight cough, which a blister, applied to the chest, completely removed. In the union of the wound a slight salivary fistula remained, which Mr. Brodie ordered his dresser to touch lightly with the lunar caustic every other day, so as to form a very slight slough. The man was made an out-patient about three weeks ago, and when last we saw him he was looking very well, and there was scarcely any deformity perceptible from the operation.

The other operations performed have been minor ones. Hemorrhoids, fistula in ano, necrosis of the tibia, &c.

EXAMINATION AT THE ROYAL COLLEGE OF SURGEONS.

To the Editors of The London Medical and Surgical Journal.

GENTLEMEN,

I HAVE to thank you for your kindness in inserting my former letter on the Examination at the Royal College of Surgeons; nor should I have ventured to trespass so soon on your columns again, but for a letter contained in your last number, in which the writer, J. C. G—Y, has launched out in a fit of fury, and armed with

“Guns, trumpets, blunderbusses, drums, and thunder,”

has threatened instant death to you for inserting my letter, and to me for writing it.

Lunatics rave most at the full moon, and beggars ask your charity with one hand, and with the other threaten to demolish your head with a bludgeon if you refuse them; and the only excuse which I can make

for your correspondent is, that he must belong to one or other of these two classes of society, or he never would have written in such a despicable style, against one whose only motive in writing was to smooth that path of difficulty which so many have trodden, and which so many, like himself, will have to tread; or, perhaps, he may have got through all his difficulties, and reached the College of Surgeons, and there been *rejected*!!

His arguments, inventions, and suppositions, are alike false and futile; and the only thing I can do is to leave him to the ravings of his own disordered imagination. He may write again if he pleases; but he must not expect me to take the trouble of answering him after this letter.

I remain, Gentlemen,
Your's obliged,
C. D. M.

CHOLERA IN DUBLIN.

WE are grieved to learn that cholera advances in Dublin, but is entirely confined to the lower classes, among whom it will, most probably, produce great havoc. So far as it has extended, as yet, it has caused great mortality, which was to be expected from the unparalleled wretchedness of the poor of the sister country. Humanity appeals to the Irish Government in behalf of the most distressed people on earth, and sets the glorious example of France before them. We trust, nay we are confident, that the gallant nobleman now at the head of affairs in Ireland, will plead the cause of the afflicted before a truly paternal Monarch, and a wise and good Government, and the most generous nation on the face of the earth—and that this appeal will not be made in vain.

BOOKS.

THE Principles and Practice of Obstetric Medicine, in a series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children. Illustrated by numerous Plates. By DAVID D. DAVIS, M.D.

M.R.S.L., Professor of Midwifery in the University of London. Part VI. April, 1832. John Taylor.

This Part maintains the character of its precursors, and merits our approbation.

A Treatise on the Injuries, the Diseases, and the Distortions of the Spine; founded on an Essay to which the Jacksonian Prize, for the year 1826, was adjudged by the Royal College of Surgeons. By R. A. STAFFORD, Surgeon to the Mary-le-bone Infirmary, &c. &c. 8vo. pp. 302. London, 1832. Longman and Co.

This Work is arranged from the personal observation of the Author, and from facts collected at the bedside. It abounds with instructive cases, and deserves a place in every medical library.

A Clinical Report of the Royal Dispensary for Diseases of the Ear; with Remarks on the Objects and Utility of the Institution. By JOHN HARRISON CURTIS, Esq., Aurist in Ordinary to His Majesty, &c. &c. 8vo. pp. 50. London, 1832. Longman and Co.

On the Nature and Treatment of Glandular Diseases, especially those denominated Cancer, with mode of Treatment; and on the too frequent use of Mercury, with a detail of various cases of Cancer cured without the Knife. Also on Cholera, Fissure of the Cranium, and Enlargement of the Heart. By SIR CHARLES ALDIS, Surgeon and Accoucher, &c. &c. 8vo. pp. 116. London, 1832. Highley.

NOTICES TO CORRESPONDENTS.

"FREEDOM."—The object of our correspondence is answered in this Number.

Mr. H.—We are much obliged by the two letters, and shall comply with the request of the writer. The account of the provincial hospitals as soon as possible.

Mr. Bateman's valuable communication in our next.

M. R.—We have received four New York papers, but not the one intended by our correspondent. Any packet directed to our publishers, or to 61, Hatton Garden, will reach us. We are extremely happy to learn the prosperity of our correspondent.

H. A.—Many lecturers acquit themselves very well in their class-rooms, as their audience is composed of novices, to whom their dicta is new; but when their discourses are printed, they appear jejune and superficial; and hence the objections to the insertion of lectures in this or in any other Journal.

Alpha.—There can be no doubt but some honest Journalists must be overwhelmed with shame at our exposures of their suppression of truth as to the *pay* of the Central Board of Health. What will their readers think of the barefaced falsehood of which we have convicted them.

Mr. West's reply to E. B. and Mr. Cory's paper in our next.

London Medical and Surgical Journal.

No. 14.

SATURDAY, MAY 5, 1832.

VOL. I.

Royal College of Surgeons.

LECTURES

ON THE

ANATOMY AND DISEASES OF THE EYE,

DELIVERED BY

G. J. GUTHRIE, Esq., F.R.S., V.P.R.C.S.

Lecture the Thirteenth.

MR. PRESIDENT,

HAVING noticed the symptoms and treatment of inflammation of the iris generally, I shall now proceed to consider each kind particularly, and first of syphilitic iritis. The iris, the great object of attention, begins to shew signs of derangement, with slight change in its colour, which deprives it of its natural smoothness and brilliancy, without interfering with its action. This alteration is, however, common to all the commencing kinds of the complaint, and occurs, frequently, by extension of disease from other parts, without proceeding further. As the proper substance of the iris partakes of the inflammation, the alteration of colour becomes more complete. The bright blue eye changes to a grey, never to be restored; the grey eye of an older person changes to a greenish-yellow hue; and the brown or black eye becomes of a dirty red. It is right every one should know, that the iris of one eye is not always similar in colour to that of the other, one is sometimes blue, and the other a greenish yellow; and, occasionally, a part of the iris is discoloured naturally in patches. In two cases I have seen a portion of it deficient, the remainder acting with precision, and twice I have found the iris wanting altogether. The surrounding zone of red vessels on the sclerotic coat, and the loss of motion of the pupil, soon prove that the change is dependent on disease, and does not occur from original formation. The na-

tural colour of the iris is not usually restored after the subsidence of the disease. The bright blue or azure eye, of a young female of twenty-five, always become a grey eye at fifty. It is a natural change, which takes place slowly and imperceptibly, and is accelerated by the occurrence of disease. Grey and brown eyes sometimes recover their colour; but there is more commonly, in them even, some slight change, which will render an experienced person suspicious of the previous evil. The well-defined sharp edge of the pupil now loses this appearance, and is less accurately observed; it becomes thicker, slightly irregular, and drawn a little backwards. The inner arterial circle is first affected, then the outer, and lastly the intermediate part; so that vessels, loaded and distended with red blood, may be seen in each with a glass with great ease, whilst they may often be observed with the naked eye. Coagulable lymph, as it is termed, is now deposited on the pupillary margin, and the iris becomes, as I have called it, furred, its striated or fibrous appearance being obscured. In one or more points a small spot appears of yellowish lymph, about the size of a very small pin's head, which gradually increases, and the membranous network of red vessels which covers it may be distinctly seen, until it bursts and allows the matter it contained to escape, when the ruptured shreds hang down in perfect evidence of its existence. These spots or tubercles, as they are sometimes, although improperly, called, form in several places at the same time on both margins, or in the centre of the iris; and they have been known, in neglected cases, to cause the sclerotic coat to bulge, and ultimately to yield, in which case the eye is usually lost; or the swelling gradually diminishes with the altered form of the eye generally.

The same kind of adhesive matter is deposited in the pupil in considerable quantity, so as sometimes to fill it up; and it even falls into the anterior chamber, the aqueous humour contained in which has very early be-

come turbid, while the cornea has lost its brilliancy. The iris being thus thickened and loaded with this peculiar adhesive deposit, which is sometimes red, as if blood were intermingled with it, has lost its capability for motion, and the pupil has become contracted in a greater or less degree. If an iritis has been conjoined with an inflammation of the choroid coat, the pupil generally will be enlarged rather than diminished; and the augmentation of size in the pupil is diagnostic of the complication, if the eye was previously sound, and demonstrates the propriety and necessity for a greater abstraction of blood, and for the adoption of more vigorous measures than might be thought necessary in the simpler cases of disease. The pupil is said, by Beer and his English copyists, to be drawn upwards and inwards in syphilitic iritis, and it is given as a diagnostic symptom. Now this is one of the points in which I cannot coincide with them, and I do not, in truth, believe one word of it. I have already said that the pupil becomes irregular, and it may be drawn, of course, upwards and inwards, or downwards and outwards, or in any other manner that a circle can be drawn in; but I do positively deny that it is drawn upwards and inwards more often than it is in any other direction. I suppose it occurred to Beer to see two or three cases in succession, in which this deviation from the natural position had taken place; and as Beer, like Homer, is suspected to have, on one or two occasions, nodded, one of these fits of somnolency must have occurred, I suppose, at the time this observation was made. At all events, if in Germany the pupils of persons who labour under syphilitic iritis go upwards and inwards, they do not take such a freak in this country in more than a fair proportion of cases; it being always understood that there is no reason why the pupil should not move in one direction as well as another, it being occasioned, I presume, by a greater intensity of inflammation in the outer circumference of the iris, and in the connection which it has with the roots of the ciliary processes at that part; a conclusion I have been led to from seeing this irregularity occur occasionally after an operation for cataract, by breaking up, in which I had reason to believe the corresponding portion of the roots of the ciliary processes, in connection with the striæ on the back part of the uvea, had been injured. The pupil then, it is my opinion, may be drawn in any one direction as well as in any other, in syphilitic iritis, and that no information can be derived from the circumstance of its situation as to the specific nature of the disease.

The pain I have already alluded to as circumorbital, and increased by paroxysms, especially at night, or rather toward morning, when it is often intense, and particularly in the situation of the ophthalmic branch of the

fifth pair of nerves, as it comes out and proceeds from the supra-orbital foramen. Vision after every paroxysm is more deteriorated, until sight is lost; and it is deserving of remark, that the patient soon becomes nearly blind, and is often incapable of distinguishing a feature in the face of the person placed before him, at a very early period of the inflammation. Vision is impaired, I believe, from the very outset of the complaint, and the increase or diminution of the disease may always be judged of by the improvement or deterioration of vision, until permanent changes have taken place in the parts affected. The red zone surrounding the cornea is composed of vessels running in straight lines, converging as they advance, but not apparently communicating in their progress towards the centre. The redness is of a brownish colour, although a peculiarity of this kind cannot always be depended upon; but it is rarely the pink red of the common inflammation of those parts which equally gives the red zone around the cornea. The conjunctiva is always more or less implicated; but its moveable vessels are easily distinguished from the fixed ones of the sclerotic coat, and the general character which the redness assumes is often alone enough to lead an experienced person to suspect the nature of the complaint; and yet it is a redness more easily understood than described, and is not always to be depended upon. Intolerance of light is not a marked symptom of this disease, unless there is a good deal of conjunctival inflammation superadded. The patient, in general, stands before you, with his eye open, complaining loudly of his loss of sight, and but little of his disinclination to face the light, the deprivation of which he is most sensible of. In rheumatic iritis it is essentially the reverse.

Syphilitic iritis is usually accompanied by an eruption on the skin, and an affection of the throat; and although it is not necessarily attended by either, so as to make them diagnostic symptoms, yet they are generally present in every well-marked case. It has been said by the best informed writers on this subject, that the eruption may be papular, scaly, tubercular, or pustular; in other words, that iritis accompanies every kind, or every secondary symptom, of the venereal disease affecting the skin. This opinion must, however, be received with great reservation, the occurrence of iritis with the scaly, pustular, or tubercular eruptions, being very rare, not, indeed, in the proportion of one case in twenty, whilst it is equally as uncommon to see a case of venereal iritis without a papular eruption. If I were to pursue this subject in the manner it deserves I should enter into the history of venereal disease generally, which would alone occupy a complete course. The disease which Mr. Hunter has described as being essentially *syphilis*, and followed by a leprous and psoratic eruption on the skin,

is rarely seen in conjunction with iritis. The disease which other authors have considered to be the cause of the pustular and tubercular eruptions rarely causes iritis, whilst that disease which many authors will not allow to be syphilis, calling it, in contradistinction, venereal, is the one which gives rise to iritis, as a natural accompaniment, and which may always be feared of the eruption. The mottled appearance of the skin, which precedes the eruption of the papulæ, has generally passed away before the iris shows signs of inflammation. The pimples have become well marked, and aggregated, like the seven stars in the Great Bear, or like those to be observed in the constellation *Pleiades*, sometimes they are smaller and more congregated, but always so characteristic that they cannot be mistaken. As the papulæ proceed they become vesicular, and then desquamate, becoming a little furfuraceous, and even scaly, but always very distinct from the *Lepra syphilitica*, or *Psoriasis*.

The appearance of the throat is not less distinct. The true dug-out excavated ulcer of Mr. Hunter is scarcely ever seen as an accompaniment of iritis; it is the enlarged and honey-combed tonsil, and the superficial ulceration, creeping with a white edge along the anterior arch of the palate, which may be almost invariably expected; or, if this has not taken place, papulæ may be seen in the throat on the back of the fauces, resembling those which exist on the skin, and the patient complains of that peculiar dryness and huskiness, which is the forerunner of this kind of ulceration.

It is curious that thirty years ago surgeons should have been totally unacquainted with the dependance or coincidence of these symptoms one with the other; that so acute an observer as Mr. Hunter should have been unacquainted with the circumstance, and that the late Mr. Pearson should have been equally unaware of it. Our knowledge of it has arisen from the attention which surgeons have lately paid to the diseases of the eye, and from the opening of hospitals for the reception of persons afflicted with these complaints, where every man may study them if he pleases. The history of the case, and the accompanying symptoms, will almost always establish the nature of the disease, and when the appearances in the eye are not sufficiently well marked to indicate a syphilitic character, the accompanying symptoms in the skin and throat suffice, in almost every instance, to remove all doubt, which after all is of little consequence, as the best method of cure in such cases is that which would be adopted in those which might be more marked.

Syphilitic iritis may be arrested in its commencement by blood-letting, purging, emetics, and the external use of the belladonna. It is, however, very apt to recur, and often at last requires the use of mercury to effect a

permanent cure. When, however, the disease is fairly set in, the patient has very defective vision, and the iris is furred; mercury should be given internally and applied externally in the manner directed in my last lecture, until ptyalism is fairly induced. The symptoms gradually yield as this takes place; the matter deposited is absorbed; the iris loses its thickened appearance; the adhesions yield readily to the belladonna; and the patient is often restored to sight, and his eye to perfect soundness of appearance, in cases where no such fortunate result could reasonably be expected.

Many persons direct the belladonna to be applied from the commencement of the disease, and to be continued until its termination. This I take to be an error. If the disease be mild, and taken in time, it is proper to do so; but if, on the contrary, the inflammation is severe, and has made great progress, the belladonna should not be applied until the inflammatory symptoms have been subdued, for the drag which it causes on the fibres of the iris often increases the inflammation, and all the uneasy symptoms in so marked a manner, that the patient becomes conscious that he owes the augmentation of his misery to its application. It is only then in these cases, where the inflammation has been overcome, that the belladonna should be applied, and in such quantity that it should give the least pain.

The belladonna, I have said, should not be had recourse to in the acute states of disease until after the inflammatory symptoms have been mitigated, if not entirely subdued; it should then be applied in the form of a thick cream to the eyebrow, and not made into a solution to be dropped into the eye, which method of using it, even in health, will sometimes give rise to inflammation of the conjunctiva. The belladonna will sometimes keep the pupil dilated in spite of the inflammation, when it arises from injury, as occasionally occurs in operations, in which case the inflammation will agglutinate the fibres of the iris to each other, and a dilatation, more or less permanent, for months, will be the result. This, however, gradually yields; and I have seen the iris recover its motion at the end of eighteen months or two years. It may be used with impunity for a great length of time, in order to dilate a contracted pupil, but it should then be dropped into the eye in solution every night or morning, or both, as may be found most advantageous. The stretching of the adhesions may be easily seen until they yield, which is often the case in the syphilitic iritis; and in the rheumatic, the proper anterior tunic, or iris, will be sometimes withdrawn, whilst the black, but still attached adhesion of the uvea, will remain, forming a large black pupil, which, on examination under the glass, will be found to be opaque, except at one spot, more or less central, in which, perhaps, some white opacity

may yet be seen, constituting what has been termed a *cataracta choroidalis*.

The constitutional symptoms vary considerably; in some cases there is a quick pulse, a furred tongue, a hot skin, and the usual attendants of fever; in other instances they are of little moment; but in all a general attention should be paid to the system at large by purgatives, which, with the abstraction of blood, will prepare the way for the administration of the mercury. Blisters on the nape of the neck, and on the temple, in the latter period of the disease, when it seems stationary, and does not yield effectually, do good; in the commencement they do no good, and add to the uneasiness of the patient. The blood in the acute cases always shows the usual signs of inflammation. The mercury, I have said, should be given so as to produce a pyalism as its full effect; this is often effected in three or four days, and removes the *iritis* like a charm. When it acts in so decided a manner the cure is generally perfect, and vision is gradually restored to its pristine state, few or no adhesions having been formed. The success is not, however, always so great, and the action of the mercury must be sustained for some days, and even two, or three, or more weeks, in conjunction with the *belladonna*, before the eye will be restored to its natural state. In other cases, which have been neglected in the beginning, complete recovery cannot be expected, and the continuation of the course of mercury must be left to the judgment of the surgeon, with reference to the state of health of the patient generally. If the *iritis* be a relapse, and the eye long remain liable to it, the second course of mercury will in general be required to be of longer duration, although, perhaps, it may be less severe.

The severe and rapid effect of mercury is decisive in regard to syphilitic *iritis*, and is usually so as to the eruption and sore throat which accompanies it; but the cure of these is rarely permanent. Without entering into the very important discussion of the propriety of giving mercury for the cure of the papular venereal eruption, when it occurs alone, I shall say that when it takes place, in conjunction with *iritis*, it is rarely cured when the mouth is rapidly affected; and that it requires a longer continued action of the remedy for its removal, or rather the prevention of its return. This, however, mercury is incompetent to do in many instances, and the eruption often returns, after the longest and most complete course, with redoubled vigour. A second course often only increases the mischief. These, I have said, are points of great surgical discrimination, and involve important circumstances, connected with the treatment of the venereal disease, which I cannot enter upon now.

MR. HETLING'S
SURGICAL LECTURES
AT THE
BRISTOL INFIRMARY.

Session 1831-32.

INTRODUCTORY LECTURE.

(Continued from page 396.)

In a science so complicated as that of Surgery, the want of some direction for the assistance of the Student, has been the more felt in proportion to the difficulty of procuring a proper guide. There are some sciences that do not require for their attainment those collateral advantages which so much distinguish the proper study of ours. In no department of human knowledge is it more difficult to arrange how to proceed and to discriminate than in Medicine and Surgery. Hence it has happened that talents and labour have become embarrassed for want of a proper direction. Surgery is still too much taught in the manner of an abstract science.

No art is more difficult than that of communicating knowledge. It is not a thing so easy as is conceived, to convey the opinion of one man's mind into the mind of another, without sustaining some loss or misunderstanding. Teaching is itself a study, and a teacher in our profession has occasion for all his prudence.

The generality of elementary teachers presume too much when they suppose that what they omit is universally known. Hence many works, which are called elementary, disappoint the expectations of the Student, and are laid by with distaste for want of the first rudiments of the science being detailed with minuteness and simplicity. This, I think, is more particularly the case with respect to the general elements of our profession.

The principal difficulties are at first. It is like learning a new language; much is to be done and required at the beginning; but when it is once fully acquired, and its *Principles* are established in the mind, it is learnt for ever. *Practice* then is all that is required, and this time and opportunities will furnish.

No one, who would apply himself to the study of Surgery with effect, must disdain to pay a careful attention to those lesser things about which he is at first employed, and to begin his practice by making himself master of them. When that which is simple is fully attained, that which is more complex will be more easily understood and better performed; and it often will be found that the final success of that which is greatly very much depends upon the accurate execution of that which is little.

I beg, therefore, to repeat, that I consider I am addressing myself to Gentlemen just entering the profession, who as yet have their knowledge to acquire, and to whom many illustrations are useful, which to others, who know more, may seem tedious. If, therefore, in any part I shall appear to enter too much into detail, let the importance of the subject plead my excuse.

Under this impression I shall offer to your consideration a few observations on the best mode of obtaining those elementary acquirements most essentially necessary to your professional education,—the principal of which are,—*Anatomy—Physiology—and Pathology*; and I take leave to introduce here the anecdote of Peter, the Czar of Russia, (half philosopher and half savage), who was so much aware of the value of *elementary knowledge*, that when he wanted to construct a fleet for his empire, he began by working with the adze in the dock-yard at Amsterdam. And in a like manner I recommend to the young Surgeon to take his knife and go into the dissecting-room.

A knowledge of ANATOMY ought to precede, or at least accompany, the study of Surgery. Unfortunately on this subject a perverted system of education has generally been followed in our profession; a young man on first entering it, is generally placed five years with a private Surgeon, or to a Public Hospital, during the whole of which period he learns little, perhaps nothing, of Anatomy. Having finished his Surgical Education he proceeds to London and begins to dissect. A more erroneous and inverted order of education cannot be conceived, for I repeat, that *a knowledge of Anatomy ought to precede, or at least to accompany, the study and practice of Surgery.* I therefore urge you all to avail yourselves of the favourable opportunity you have of dissecting and of learning Anatomy here. By all means entreat your friends to take this view of your education. It will not only be attended with present advantages to you in understanding the nature of the accidents and diseases that daily present themselves, but will relieve you from a most laborious and tedious attendance in London, where your time is so valuable and required for other branches of the profession. In fact, Gentlemen, I candidly tell you, that I cannot pretend to teach Surgery without your having some previous knowledge of Anatomy.

An opinion has prevailed that Anatomy can only be taught in London; not anything can be more erroneous. Bone—Muscle—Nerve—and Artery—are the same here as in London, Paris, or any other of the great Medical Schools. I trust you will see this in *its true light*, and that those who have hitherto neglected its advantages will give it due consideration.

Anatomy, the great basis of all medical knowledge, is the first elementary step; but it has been too often regarded as compromis-

ing the whole sum of what you are to learn, as not only the first step but the last. This is a fatal error. Mere Anatomy, as learnt formerly, was taught chiefly as a mechanic art; it is now taught as a science, under the denomination of what is termed *Surgical or Relative Anatomy*; and it is only when made the ground-work of physiological deductions that it assumes the rank to which it is justly entitled. In what I have said, I particularly beg the young Anatomist to understand, that I by no means wish him to undervalue the mechanical part of his studies; but, if I may so speak, to add the *intellectual*, and view it more with reference to disease and the performance of surgical operations.

Anatomy without Physiology is nearly useless; we, therefore, never separate Anatomy and Physiology from each other; and Pathology must be founded upon the union of both. This combined knowledge it is requisite to acquire previous to considering the diseased state of man; for it is evident that a knowledge of the healthy state must be the foundation of a knowledge of the diseased state. It is impossible to understand any derangement of the functions if we are not acquainted with their regular and healthy action. These different branches of study ought not to be cultivated separately, but in relation to each other; and, guided by their union and mutual influence, *they constitute the essentials of a scientific education.* Anatomy being easier than Physiology is consequently more advanced; it is infinitely easier to examine the muscles, and bones, and arteries, than the brain. The anatomical knowledge of the brain and nervous system has, therefore, made the slowest progress. Before the discoveries and researches of Drs. Gall and Spurzheim, of Tiedemann, Serres, and of Sir C. Bell, the anatomy and physiology of the brain and nervous system show only a succession of error and confusion. Their predecessors, unacquainted with the origin of the nerves and functions of the brain, destitute of any correct physiological principle capable of guiding them, and neglecting comparative anatomy and fœtal development, had hitherto proceeded almost without any system. It was impossible thus to acquire any perfect idea of the natural order of these parts. To the great exertions of these distinguished men we are principally indebted for a more clear, useful, and comprehensive knowledge of this very interesting and important department.

In *Human Anatomy* no important novelty has occurred of late years, except, as has been just observed, in the anatomy of the brain and nerves, and the further great improvement that it is now taught as a science. Perhaps the mechanical minutiae of this art, being pushed near to its acmé, has left little to be discovered. Consisting altogether of facts it has its limits. When every fibre has been separated, examined, and explained, the Anatomist, "like Alexander, may weep for new

worlds of animal existence," unless he extends his inquiries into the delightful and instructive regions of *Comparative Anatomy*.

Anatomy is so essential a part of medical education, and the principles resulting from this knowledge are so fundamentally important, that no collateral acquirements, however brilliant or extensive, can compensate for its absence. Yet mere anatomical knowledge does not make the practitioner; but it is an essential elementary part of that character, conjoined with Physiology, Pathology, Chemistry, Botany, a knowledge of the Materia Medica, and the study of the symptoms of disease, Anatomy forms the accomplished Surgeon; and may be considered the foundation and base of a pyramid, the apex of which terminates in rational practice. Whoever is an Anatomist may make a useful, rational, and an excellent surgical practitioner; but he who is ignorant in this essential point, whatever are his other acquirements, will often be confused, irresolute, and hesitating, when he should be prompt and decisive.

I have dwelt thus long upon this branch of education, with a view to impress, as forcibly as I am able, upon your minds the great occasion, nay, I shall not surely express myself too strongly, if I say, *absolute necessity there is for a complete anatomical and hospital education to those who look forward to place themselves in the higher ranks of our profession.*

The Lecturer proceeded to state many other advantages attending a perfect knowledge of Anatomy, as pointed out by one of our ablest teachers—that it *gives a dexterity of hand*; a manner of searching for, and seizing with the most delicate instruments, parts almost invisible to one not trained to dissection; and that dexterity and acuteness of sight give presence of mind in the moment of operation. That it had also a greater and more important use, in forming the ground of all argument on questions of practice; in fact, that it connected the senses with the reason.—We pass over many other observations on this subject, and the minute details with respect to the science of Physiology, which concluded with the following remarks on this science :—

These subjects involve a most extensive and interesting field for inquiry, and is so intimately connected with Anatomy, that I need scarcely press it upon your notice. Indeed *Physiology is so bewitching a study*, that it is very apt to take up too great a proportion of the attention of students, especially such as possess a lively imagination. I would, therefore, caution you against too hastily attempting to become physiologists. Be anatomists first; physiology, at least, in its most important branches, will follow of course, and the rest may afterwards be easily learned. But if you amuse yourselves too early by indulging physiological speculations you will find that you are getting on enchanted ground, your attention will be diverted from facts; real sub-

stances and things will escape your notice, and you will become theorists, not practitioners.

We also pass over the subject of Pathology, and hasten to the conclusion of this interesting Lecture.

So important is the duty of combining pathology with surgery, anatomy, and physiology, so essential is it to the perfection of our art, that you will easily be persuaded to direct your attention to this useful part of study, which admits of continual improvement, by dissecting every diseased case that offers to your notice. *The examination of morbid parts is a satisfaction in every difficult or doubtful case, it is in general an appeal to truth; it establishes the fact we are searching after, and corrects conjecture and theory.*

I have endeavoured to show, that a knowledge of anatomy ought to precede or accompany the study of surgery; for anatomy, I repeat, is the basis of all medical knowledge, the *sine qua non* of the whole; that, combined with physiology and pathology, it forms the necessary qualifications of a good surgeon, and enables him to prescribe, to consult, to prognosticate, and to decide on the most difficult questions submitted to his judgment.

I would have you dwell with confidence on this, that all which is essential to the character of a good surgeon may be acquired by diligence and study. To think otherwise were as discouraging as untrue.

I have thus, Gentlemen, offered you a few general observations on the study of surgery, anatomy, physiology, and pathology.

It has been truly observed, by Mr. Brodie, that "the dignity of our profession, and its rank in society, depend, in a great degree, on its *scientific* character; and those who are anxious to uphold it in the estimation of others, would do well to bear in mind, that whenever its connexion with science is dissolved, it must sink to the level of meaner occupations." By the intellectual talents principally of Mr. John Hunter, Sir A. Cooper, Mr. Abernethy, and Mr. J. and Sir C. Bell, &c. a new direction has been given to this subject; and through their exertions, in a great degree, our profession has attained the rank which it deserves to hold amongst the highest departments of human knowledge.

On Saturday I shall proceed to make some other general observations relative to the *Duties and Attendance on Hospital Practice*—on the *Principles and Practice of Surgery*—on the great advantages of *Clinical Lectures*—on *Professional Conduct and Character*—together with a few *Miscellaneous Remarks* connected with our subject.

(Conclusion of the First Introductory Lecture.)

A BRIEF
HISTORICAL SKETCH

OF THE FOUNDATIONS OF SOME OF THE
PROVINCIAL HOSPITALS
AND
MEDICAL SCHOOLS.

IN the year 1735, Bristol had the honour of setting to the rest of England the example of a Provincial Infirmary, supported entirely by the voluntary contributions of her citizens and neighbours. At that period there was nothing of the kind out of the metropolis; indeed its foundation is nearly coeval, or altogether precedes by many years, every charitable institution for the relief of the sick and poor, even in London, together with Scotland and Ireland—royal and chartered foundations excepted. By the munificence and fostering care of its governors, this Institution contains 200 to 220 in-patients; out-patients, from 5,000, to 6,000; average number of casualties, about 1,500 annually.

Previously to the year 1816 no Medical Schools existed in any other part of England than the metropolis; and even in London itself they were organised on a less extensive plan than they now are. Since that year Schools of Medicine and Surgery have been established in Manchester, Birmingham, Liverpool, Leeds, Bath, Bristol, &c. In each of these, students are now instructed in the principal branches of medical science, and it is admitted that students who have received their education in these schools, have acquitted themselves with marked ability as candidates for their diplomas, when under examination at the College of Surgeons and Apothecaries' Hall. It is therefore interesting, and forms a part of our medical history, to notice the progress of the new Provincial Schools, and the great public benefit which will result to society from their establishment:—

Bristol Infirmary, founded ..	1735
Winchester.....	1736
York	1740
Devon and Exeter	1743
Northampton	1743
Shrewsbury	1747
Liverpool	1748
Worcester	1749
Newcastle	1752
Gloucester	1756
Chester	1756
Oxford	1766
Salisbury	1767
Hereford	1775
Birmingham	1779
Nottingham	1782
Bath Casualty	1788
Bath City	1792
Sheffield.....	1797
Bedford	1803

ON THE
STUDY OF THE HUMAN MIND,
VIEWED AS A BRANCH OF
MEDICAL EDUCATION.

BY
FORBES WINSLOW, Esq.

METAPHYSICAL STUDIES have fallen, during the course of the last century, into general disuse—I may say into a condition almost bordering upon universal contempt—for in an age when nothing is considered important which cannot be reduced to the practical purposes of life, conducing to the prosperity of nations or individuals, it is not to be supposed that what is often considered as little better than the delusion of over-heated imaginations, or at best but a tissue of useless definitions and nice distinction of terms, could long maintain a place among the useful and ornamental branches of education. Accordingly metaphysical studies have been discarded by the *οἱ πολλοί* of our English Universities, and only preserved in Scotland, as affording to the philosophical classes abstract subjects for disputation and English composition. I shall not here enter into an examination of the comparative merits of any system of education, but merely observe, that though it is true the grand object of all education is mental discipline, and it is a good system or a bad system in proportion to the rapidity with which this cultivation is effected, and the degree of expansion the mind receives from its influence, and that our present scholastic system fully accomplishes this object by the close and analytical reading required of all who aspire to the honours awarded by our chartered seminaries, yet very little beyond this is acquired. Other pursuits and studies are grappled with better effect by the well-trained minds; but the knowledge which has been gleaned with so much care and assiduous study from the pages of antiquity, when brought to bear upon the practical pursuits of life, is found to be almost a dead letter. It does not give the student what he ought to know when launched upon the world's tumultuous sea; he is called to direct the mighty vessel of the State, or occupy the subordinate, though not less important, situation of dispenser of its laws. For these more time must be expended in the pursuit of more useful knowledge; while that which has been already acquired is almost wholly forgotten, or remembered only for the purpose of adding a few classic embellishments to forensic or senatorial elevation, a poor and contemptible recompense for the time which has been consumed in its acquisition. The minds of men have been considered as barren and uncultivated wilds, requiring only the application and cure of

husbandry to prepare them for any seed. No distinctions are made as to their various capabilities, but they are thrown with most unphilosophical indiscrimination into the same pursuits; thus genius is cramped, and the progress of philosophy retarded. As in medicine no certain rule can be adopted which will apply indiscriminately to all constitutions, but every case presents anomalies, subverting the reasonings drawn from other premises, and requiring a new application of rules and remedies; so the mind of every individual displays a bias towards some particular pursuit, while the most unconquerable disrelish is manifested for every other. Our poet, Akenside, correctly observes, that,

“ ——— Since the claims
Of social life to different labours urge
The active powers of man, with wise intent
The hand of nature on peculiar minds
Imprints a *different bias*, and to each
Decrees its province in the common toil.”

The object of this paper is to endeavour to draw the attention of the medical philosopher to the study of the human mind, in order that some useful application of the knowledge of its idiosyncrasies, its various diseases, and the effects of its powers on the bodily frame, may be made to the purposes of his profession; and that, while the mental constitution is discovered and studied, the individual may be thrown into that channel of investigation which, at the same time, gradually advances the mind from its almost embryo state to a degree of expansion sufficient for the purposes of active and energetic life; that kind of knowledge is only attempted which is either directly or collaterally connected with his favourite pursuit.

When we cast our eye over the vast field of nature, and survey her matchless beauty and endless variety of form; and when we reflect that all this, to be properly appreciated, must be submitted through the medium of the senses to the mind, and there every shade of colouring, and every peculiarity of texture, taste, and sound must be examined by the proportion, and weighed with the nicest discrimination by the judgment, ere one thing can be distinguished from another, we are not surprised that this most subtle machinery, which, in one instant, can thus so nicely discriminate between things similar, perhaps in all respects but one, should have been considered by the Alexandrian philosophers as the workings of the Divine Mind. Plato himself, whose towering genius elevated him above all his contemporaries, could solve the question only by supposing that all ideas are eternal, uncreated, and immutable forms or models, according to which the Deity of an eternal matter made every species of thing that exist. And Pythagoras taught three first principles of all things. 1st, An eternal matter, of which all things are made. 2ndly, Eternal

and immutable forms or ideas, according to which they were made. And, 3rdly, an efficient cause, the Deity who made them.

The opinions of philosophers, from the time of Plato to that of Bacon, were little better than those I have mentioned. All science and philosophy was obliged to pass under the yoke which Aristotle put upon the necks of his followers, and the chimeras of imagination were substituted for the sober and only safe method of reasoning from induction, revived by Lord Bacon, to whom all science is indebted for sweeping away the old scholastic rubbish which had overspread the whole region of philosophy.

Subsequently Des Cartes, Locke, Hobbes, Berkley, Hartly, and Hume, have all contributed something towards the advancement of this science, though it must be acknowledged that these philosophers too often forgot their aim, the advancement of truth, in endeavouring to subvert in toto the opinions of all those who have preceded them, and built their own theories upon the ruins of their predecessors.

The limits of this paper will not allow me to enter into the history of the rise and progress of this branch of science, or to attempt to give even an abstract of the different theories which have been entertained and inculcated, at various periods, regarding the nature and constitution of the human mind. My object is more to point out to the student of medicine the advantages derivable from the study of mental philosophy, viewed as a branch of medical education. In an essay which the Editors of this Journal did me the honour of publishing a few weeks ago, I attempted to investigate the influence of the mind and passion on the corporeal frame. I related a great many instances, illustrating the pernicious influence which the mind and passions exerted over the body. If this influence is really so great, as it is represented to be; if life can be suddenly extinguished by inordinate exertion of the mind; and if diseases frequently owe their origin to the effect of passion, then, certainly, no rational person will question for a moment the necessity and importance of the study of the mind and passions to the medical practitioner. As the mind, it has been well observed, undoubtedly rules the body, unless he form an idea of the mind, how can he know how to preserve the health of the body? We might as well pretend to negotiate with a foreign nation, without any knowledge of the nature of its government, or under whose jurisdiction its affairs are conducted.

In that dreadful malady, with which we have often to combat, denominated insanity, how can we successfully attempt its cure without a knowledge of the mind in a state of *health*? To the individual who directs his attention almost exclusively to the management of the unfortunate insane, the study of the healthy or unsound condition of mind

is of paramount importance. As well might he attempt to grapple with the diseases of the body, without a knowledge of its organization, as to endeavour to manage the different modifications of insanity, without an intimate acquaintance with the physiology of the human intellects. "Medical men," says a writer on insanity, "have anxious practical duties more pressing than any claims of mere mental gratification, and must make their studies subservient to them; but this may with truth be said, that the study of a man's understanding requires to be pursued, to a certain extent, to enable medical practitioners to perform an important part of their practical duties with credit."* Of the utility of metaphysical studies, to a person engaged in the pursuit of medical science, there can be but one opinion among the rational and thinking portion of the medical profession. Dr. Southwood Smith appears to think that mental science is too much neglected by our profession. He observes—"the degree in which the science of mind is neglected in our age and country—(may it not be justly added, especially in our profession?)—that science upon the knowledge of which every individual mind is dependent, is truly deplorable. Medicine is an inductive science, the cultivators of which are peculiarly exposed to the danger of making hasty assumptions, and of resting in partial views; yet it is not deemed necessary that a practitioner should be disciplined in the art of induction, or should be cautioned against sources of fallacy in the practice of making inferences."

Independent of the practical utility, resulting from an inquiry into the phenomena of the human mind, it is a study, on account of its exalted nature, well worthy our serious attention. In no situation of life will this species of knowledge be unavailing. The study too of that fabric, which raises its possessor to so exalted an eminence above all created excellence, is worthy of universal attention, when we remember that it is given for the purpose of controlling man's powers and animal propensities, and bringing them into that degree of subjection whereby they may become beneficial to the individual, and to the world at large, enabling him to exchange with others those results which the powers of his own, and the gigantic efforts of other minds, have developed; maintaining and perpetuating the most dignified and exalted state of happiness, the attribute of social life; unfolding not only the treasures which the concentrated powers of individuals are enabled to discover, but developing those more quiet and unobtrusive characteristics of virtuous life, those social affections, which are alone calculated to make the present state of being happy.

"Nature, in zeal for human amity,
Divides, or damps, an undivided joy.
Joy is an impost; joy is an exchange;
Joy flies monopolies, it culls for two:
Rich fruit, heaven planted, never pluck'd
by one." Pope.

To the moralist, also, the investigation of the mental constitution is pregnant with interest, for by it those springs of action are discovered which, their good or evil tendency, materially affect the present and future happiness of the individual, and being discovered may either be encouraged or controlled, thus training men to virtue, purity, and happiness.

FRACTURES OF THE LONG BONES.

By H. BATEMAN, Esq. Surgeon to the
Islington Dispensary.

*To the Editors of the London Medical and
Surgical Journal.*

GENTLEMEN,

It appears to me that the younger members of our profession, as well practitioners as students, ought to feel themselves much indebted to Mr. Hart for having called their attention to a species of accident, which, although by no means rare, has been hitherto but little spoken of, and still less frequently described. For myself I have much pleasure in acknowledging, that he has explained this subject to my mind much more satisfactorily than I had previously been able to explain it to myself, and has fully accounted for all the symptoms connected with several cases of *bending of the long bones in children from external violence*, which I have seen. Perhaps, however, I should not have felt myself called upon to come forward thus early to make this statement, had it not been for the circumstance of a case of partial fracture of the radius presenting itself to me on the morning of last Friday,—the day on which the number of your Journal, containing Mr. Hart's paper, was published, although more than twenty-four hours before I was aware of its having been written.

In the middle of the day, on the 20th inst., Joseph Craven, of Noel's Buildings, Islington, a little boy of four years of age, fell from a chair upon which he had climbed, and in his fall struck the right arm against another chair which stood beside it. He immediately cried out that his arm was broken, and his mother perceiving it to be much distorted at once set about straightening it, but not succeeding to her wish brought him in to me.

My friend and colleague, Dr. Robertson, happening to be with me at the time, I had the advantage of his assistance. We found the radius bent in the mesial direction, near its middle, so as to encroach greatly on the interosseous space, and very nearly touch the ulna at the convexity of its curve. The child complained most obstreperously at the

* Dr. Conolly.—Indications of Insanity.

slightest touch; but this did not prevent me from gently rotating the hand, when I found that the head of the radius rolled upon the external condyle of the humerus and lesser semi-lunar cavity of the ulna, as in its entire state, and there was no crepitus on motion. The hand did not incline either more towards its radial or ulnar aspects than usual, the fingers were flexed.

I first endeavoured to straighten the bone; then applied graduated compresses the whole length of the fore-arm, in such a way as to fill up the interosseous space, and thus preserve the radius at a distance from the ulna; then applied a flat splint along the inner side of the fore-arm, and a counter splint and compresses on its opposite side. The splints were so broad as to extend beyond the edges of the bones, and were secured by tapes, which were so placed over the hand as to incline it towards its ulnar edge, thus making the hand a lever by which the radius would be still further separated from the ulna. Those who have attended the cliniques, and seen the practice of Dupuytren, will remember the importance which that great surgeon attaches to this position in fractures of the radius, and especially when these are situated so low down as to be much acted upon by the pronator quadratus.

Of course it is too early for me to say more of this case at present, than that it appears to be going on favourably.

Had the true nature of this kind of injury been more generally understood, I think the following case, which was brought to me in the early part of last summer, would have been better and more successfully treated. A boy, about seven years of age, fell, in attempting to get up behind a carriage, which was passing along the road, and injured his left arm. His mother took him directly to one of the public institutions in this metropolis, and shewed him to one of the surgeons, who told her that the arm was not broken, and advised leeches and lotio saturn. She continued her attendance on this gentleman for three weeks, and finding the arm to be different in shape from the other was induced to change her surgeon, and one morning brought him to me. The ulna was bent at an angle about its middle, and, of course, firmly united. There was a little tenderness remaining, but no serious impediment to motion; and, with the exception of its crooked shape, it promised to be as good an arm as the other. Having said that I thought it possible that splints, firmly applied, and kept on for a long time, would probably at length diminish the deformity,—the mother requested me to try this plan, which I pursued for three months, with a decided diminution of the angle on the lower part of the bone. The mother expressed herself satisfied with the state in which it then was, and seeming disinclined to pursue the plan any longer it was given up.

This case, I conceive, to have been one of partial fracture, which might have been cured without deformity, had it been treated from the commencement on the plan recommended by Mr. Hart.

Whilst on the subject of partial fractures I am reminded of a case of fractured clavicle, which occurred to me some years ago when an assistant in the country; and although this cannot be referred to the description of case which we are more immediately considering, it may, perhaps, be worth mentioning, as it puzzled me a good deal at the time, and might, perhaps, have puzzled much better surgeons, if they had not previously met with a similar case.

A stout young man, a farmer's servant, 21 years of age, was employed in filling a cart with manure—when, having thrown his arm farther back than usual, he suddenly felt acute pain in his right clavicle, and found that he could no longer propel his loaded pitchfork. Having come directly to the house of the gentleman with whom I was then residing, I had an opportunity of seeing him within half an hour after the occurrence of the accident. His shoulders were of equal height, and the line of the clavicles regular, but there was slight puffiness near the lower edge of the right clavicle, about one third from its sternal end. He could, without much difficulty, place his hand flat upon his forehead: this, however, occasioned slight pain in the part just described, but he was able to move his arm freely backwards and forwards as high as the top of the sternum, without the slightest inconvenience. Knowing that a person in the neighbourhood got the greater part of his means of subsistence by setting bones that were never broken, and reducing dislocations which never existed, I was determined not to treat the case as either one or the other, without feeling fully satisfied of my having really such a case to treat, and not being able to make up my mind to the existence of fracture, from these symptoms, I told the man the bone was not broken, and advised cold lotion and the avoidance of all extensive or violent motions of the extremity. To account to myself for the state of things in this case, I fancied that at the period the man was making the extra exertion, which brought on the mischief, his subclavius muscle was employed in fixing his clavicle, and that having pulled, perhaps, somewhat more violently than usual, it had ruptured a few of its own fibres, thus occasioning the puffiness, pain, and other symptoms.

Five days afterwards I was looking out of the window, and saw my patient coming towards the house with such an alteration in his appearance, that I was convinced he had a fractured clavicle before he reached the door. The right shoulder was considerably lower than the left (my notes say two inches lower), and he was supporting the hand and arm of that side with the other hand. On

inquiry it appeared that he had been again throwing his hand farther back than my advice sanctioned, when he suddenly felt his collar bone give way. The sternal portion now projecting considerably higher than the humeral end at the seat of the fracture, the loss of power and all the other symptoms were now present; and having acknowledged the error in my original diagnosis, I endeavoured to make the best of the matter as it now stood. The case was treated according to rule, and did very well in about three weeks.

All that can be said in favour of treating suspicious cases as real fractures, would have been unnecessary to me at that time, as I firmly resolved if a similar case occurred to me again, at once to put it up in the regular way, and not stay to theorize about the possible existence of spasm of the subclavius.

H. BATEMAN.

Islington, April, 24th, 1832.

Reviews.

Lithotrity and Lithotomy compared: being an Analytical Examination of the present Methods of treating Stone in the Bladder; with Suggestions for rendering Lithotrity applicable to the Disease in almost all its stages and varieties; and Remarks on the general Treatment of Gravel and Stone. By THOMAS KING, M.D. M.R.C.S. Surgeon to His Excellency the French Ambassador, Lecturer on Surgery, &c. &c. 8vo. pp. 320. Plates. London, 1832. Longman & Co.

THE prevention of the formation of urinary and other calculi, is still a desideratum in medicine; but happily for humanity and medical science, the splendid discovery of M. Civiale, enables the surgeon to avoid the most dangerous and fatal operation of his art. Lithotrity has effected this wonderful improvement, and it is, properly considered, one of the greatest discoveries of the present century.

It is well established in France, and has been most favourably received in this kingdom. It is really an astonishing operation, and is preferable to every other plan proposed for the removal of the stone in the bladder. It is not applicable in every case, and it is a peculiar feature in

Dr. King's work to extend its applicability in almost all stages and varieties of calculus. We have repeatedly witnessed its successful performance by Mr. Costello, who was the pupil, and for many years the assistant, of Dr. Civiale. This gentleman has now relieved thirty patients in London; and, we are happy to inform our readers, that he is about to publish a work on this important operation, and upon diseases of the urinary organs. Notwithstanding the brilliant success of lithotrity, patients are daily subjected to lithotomy in every hospital in London; and, under such circumstances, Dr. King has laudably brought the comparison of the old and new operations before the profession. He first gives a minute and faithful description of the anatomy of the urinary organs, which contains some new points hitherto unpublished. This piece of descriptive anatomy is ably executed, and is highly creditable to the author as an anatomist. He then enumerates the various plans for performing lithotomy; next, the advantages and disadvantages of lithotrity; and finally, he makes some important suggestions, for the treatment of gravel and stone. His work is, however, open to censure, as the following extract fully proves:—
“About the same time Mons. Civiale succeeded in the same object, and to him was reserved the fortune and high privilege of first employing lithotrity with method and success upon the living subject; he is still a very successful operator. Baron Heurteloup is now quite as successful and scientific a lithotomist, and to him the world is indebted for the invention of instruments more ingenious,” and, in many respects, more perfect than those known before his valuable labours. The merit of laying down the principles of lithotrity, more comprehensively and more perfectly than any other person, belongs also to him, and he shares likewise the honour of its introduction into Great Britain, to which my skilful

friend, Mr. Costello, I hope I have endeavoured to contribute."

It really puzzles us to account for the very great mistake into which our author has fallen, when he, who was so long resident in Paris, and must be well aware of facts, ascribes the whole merit of lithotrity to M. Heurteloup. We should like to have seen proofs of the correctness of his statement, as all the French periodicals and the profession, with the exception of Baron Dupuytren and half a dozen others, have given Civiale the whole merit as the discoverer, inventor, and only celebrated operator in Paris. If Baron Heurteloup were entitled to the superiority here given him, he need not have left his own country to settle in this; and while M. Leroy d'Etiolles, Amussat, and others have had little, if any practice in Paris, Civiale has more than he can attend to, and is obliged to have an assistant. His patients arrive from all parts of Europe. Dubois and Lisfranc were cured by him. Such being the facts, we cannot help thinking that Dr. King has not done him impartial justice. Again, what are the facts with respect to M. Heurteloup's more ingenious instruments? Why, that Civiale had suggested every one of them, and proved them to be inapplicable before the Academy of Sciences, as all the French periodicals bear testimony. Neither has M. H. the merit of laying down the principles of lithotrity more comprehensively and more perfectly than any other person; this is a gross injustice to M. Civiale, whose various memoirs must be well known to Dr. King. The only explanation we can offer for these singular statements of the author is, that he has allowed his mind, during his residence at the Hotel-Dieu, to be prejudiced by Baron Dupuytren's hostility to Civiale. Let us duly consider one fact, which is this—M. Heurteloup has recorded the following eulogy on Civiale's claims in a laudatory article in the Archives Generales, May 1824. "The foregoing is a rapid exposé of M.

Civiale's methods * * *. For my own part, hurried away by my enthusiasm, with splendid results which M. Civiale has obtained from the researches in which he has been engaged since 1817," &c. &c. He concludes by adopting the words of the Academy of Sciences,—“We are of opinion that the method proposed by Dr. Civiale, for destroying stone in the bladder, without having recourse to the cutting operation, is alike glorious to French surgery, honourable to its author, and consoling to humanity.” Yet Dr. King informs the world that Baron Heurteloup has done most for lithotrity. In the year 1827 the Academy granted 10,000 francs to M. Civiale, and in 1828 promised a prize to Baron Heurteloup for certain improvements made in lithotritic instruments, so soon as he would publish them; but up to this time we believe the prize is in abeyance.

But to return to the work before us, we are happy to be able to speak favourably of its execution in all other points. It certainly deserves a place in the library of every surgeon, who undertakes to perform either lithotrity or lithotomy.

The author observes, “our conviction is, that wherever lithotrity can be employed, lithotomy should never be thought of.” We fully agree with him, and think that those who perform it, and thereby endanger health, and hurry the approach of the death of the patient, if not absolutely induce it, incur an awful responsibility, which every surgeon whose mind is properly constituted must be anxious to avoid.

The surgeons of London cannot be blamed for being sceptical on this operation, as it has failed and proved fatal when performed by persons whose pretensions and presumption are too shallow to deserve notice. Has it failed in the hands of Civiale? Let France and Europe bear witness. It will and must be popular with the profession in this country.

The Dissector's Manual; or Student's Companion. Illustrated by numerous Wood Cuts, clearly exhibiting and explaining the Dissection of every Part of the Human Body. By EDWARD WILLIAM TUSON, F.L.S., Lecturer on Anatomy and Physiology, at the Little Windmill Street School, &c. &c. 12mo. pp. 219. London, 1832. Wilson.

THIS work is certainly the Dissector's Manual, and is better adapted for the use of those who are commencing the study of practical anatomy than any work which we have yet seen. The delineations of every part of the body are, in general, so extremely accurate, as to enable the student to go on with dissection in the absence of a demonstrator. The work contains a vast deal of information in a small compass, and has all the advantages of Paxton's expensive production, at less than half the cost of this system. The student may think it a costly work on viewing its size, but we assure him that we are very much

surprised it is published so reasonably, when we consider the immense number of illustrations, which are extremely expensive. We shall give a few extracts in proof of the correctness of our opinion as to the utility of the work. After a faithful description of the anatomy of the hip-joint, Mr. Tuson notices the dislocations connected with this part. He observes :—

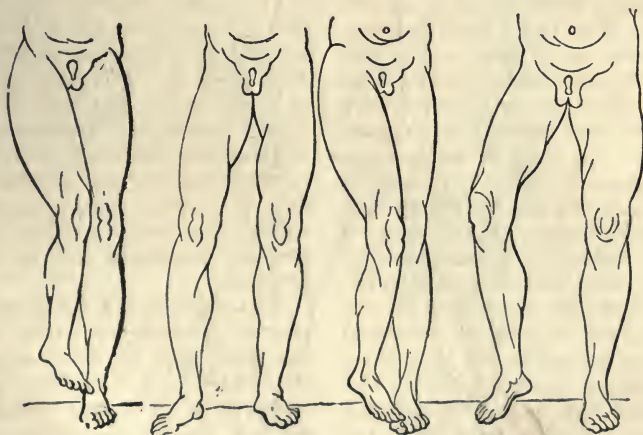
“ Having considered the formation of the structure of the joint, the dissector may next bear in mind these several dislocations that are liable to happen to this articulation. They are four in number :—1. On the dorsum of the ilium, or upwards; 2. Into the foramen ovale, or downwards and inwards; 3. Into the ischiatic notch, or upwards and backwards, when the head of the femur is beneath the pyriformis muscle; 4. Upon the pubis, or upwards and inwards. The accompanying diagram is intended to accelerate the knowledge of the position of the foot in these several displacements.

(FIG. 1.)

(FIG. 2.)

(FIG. 3.)

(FIG. 4.)



1. Dislocation upwards, upon the dorsum of the ilium.

2. Dislocation downwards, into the foramen ovale.

3. Dislocation upwards and backwards, into the ischiatic notch.

4. Dislocation forwards and upwards, upon the os pubis.

1. Dislocation of the head of the femur upon the dorsum of the ilium.—The affected limb is from two to three inches shorter than the sound one; the knee is a little bent, and carried towards the other; the knee and foot are turned inwards, the knee being higher than the other; the great toe rests upon the dorsum of the opposite foot, and abduction of the limb is prevented.

2. Downwards and inwards into the foramen ovale.—The affected limb is from one to two inches longer than the other; when the patient stands erect, the knee projects, and is advanced and drawn from the other, and cannot be made to touch the sound knee without great violence. When the thigh is attempted to be straightened, the body is bent, owing to the psoas magnus and iliacus internus being

in action, and the head of the femur being lower than the acetabulum.

3. Dislocation backwards into the ischiatic notch.—The limb is an inch, or an inch and a half shorter than the sound one; the knee and foot are turned inwards, and the toe rests upon the ball of the great toe of the sound limb.

4. Dislocation upon the pubis.—The limb is shorter; the great trochanter is raised, and the bullock is sunk; the knee, leg, and foot turn outwards, and the head of the bone may be felt a little above the level of Poupart's ligament, upon the pubis: It forms a round hard swelling, which moves when the limb is rotated and bent."

The modes of reducing these dislocations are pointed out in the accompanying diagram.



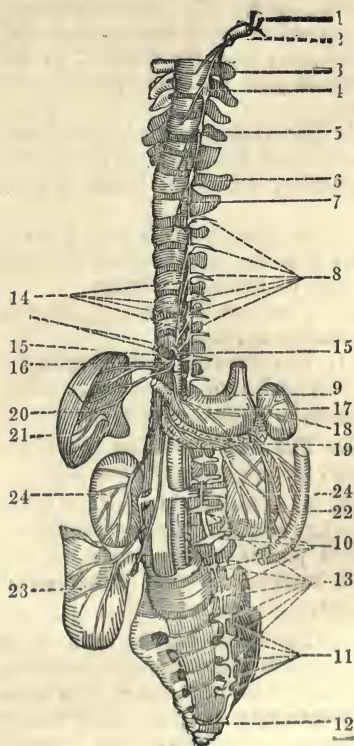
“ 1. *Reduction of the dislocation of the head of the femur upon the dorsum of the ilium.*—Should the patient be a strong-muscled man, it may be necessary to have recourse to venesection, for the purpose of producing relaxation, as well as to prevent the subsequent inflammation. The man may then be placed in the warm bath at about 100° , gradually increasing it to 110° , until fainting is nearly produced. While in the bath doses of tartrate of antimony, with ipecacuanha, may be administered, until nausea is excited. The patient may then be placed upon a table situated between two staples; a strong girt may then be placed between the thighs, the ends of which may be fastened to the staple at the head of the table; this girt is intended to fix the pelvis, which must be ascertained prior to the commencement of employing the extension. A wetted roller is to be placed round the thigh, just above the knee, and upon this a leathern belt, with straps and rings attached to it, should be tightly buckled; the pulleys may now be fixed to the straps, when the knee is to be slightly bent, and then directed across the other, when the surgeon may make gradual and careful extension, resting at short intervals, (but not relaxing the extension,) so as to counteract the action of the muscles. When he finds that the head of the bone is brought near the acetabulum, the limb is to be rotated gently, under which motion the reduction will be accomplished.

2. *Method of reduction of the dislocation into the foramen ovale.*—The patient may be placed upon his back, and the pelvis should be fixed by the girt passed between the scrotum and upper part of the injured limb, the end of which should be attached to a staple in the wall. The pelvis being fixed, the surgeon is to grasp the ankle of the injured limb, and bring it across the other; or, if the patient be a powerful man, the ankle may be drawn below the sound leg, and thus the head of the bone will resume its proper situation.

3. *Method of reduction into the ischiatic notch.*—The pelvis being fixed, extension may be commenced, drawing the limb across the other thigh. A napkin is to be placed under the dislocated thigh, that the surgeon may (by elevating the thigh while extension is being made,) raise the head of the femur over the brim of the acetabulum, and the reduction is in this way accomplished.

4. *Method when upon the pubis.*—The pelvis being fixed, extension may be made upwards and backwards, a towel having been previously passed beneath the injured thigh, so as to enable an assistant to raise the thigh during the extension, which will draw the head of the femur over the brim of the acetabulum. The extension is then to be continued until the head of the bone assumes its position.”

The following diagram is intended for the illustration of the great sympathetic nerve:—



1. The formation of the nerve in the canalis caroticus, by branches of the fifth and sixth pair.

2. Passing through the canalis caroticus.

3. Sending off branches to unite with the cervical, the par vagum, and ninth pair.

4. The superior cervical ganglion, situated opposite the second cervical vertebra, sending off branches which pass to supply adjacent parts of the neck.

5. The second or middle cervical ganglion, situated opposite the fourth dorsal vertebra.

6. The inferior cervical ganglion, placed upon the sixth cervical vertebra. These two ganglia send branches to adjacent parts of the neck, and some filaments which enter the thorax over the subclavian vein, to assist the par vagum to form the cardiac and pericardiac plexus.

7. The sympathetic, entering the thorax behind the subclavian vein, giving off a small recurrent branch which runs from the anterior to the posterior part, to supply the adjacent parts.

8. The sympathetic, forming ganglia with all the dorsal nerves, twelve in number, below the heads of each rib.

9. The situation where the nerve perforates the diaphragm, running through its muscular portion.

10. The nerve forming ganglia with the lumbar nerves.

11. The nerve descending upon the anterior surface of the sacrum, forming ganglia with the sacral nerves.

12. The nerve uniting with its fellow, forming the ganglion impar.

13. The two last lumbar and three superior sacral, forming the hypogastric plexus, which sends off several branches to supply the pelvic viscera.

14. The third, fourth, fifth, sixth and seventh dorsal ganglia, sending off branches to unite together, to form the ramus splanchnicus, which passes between the long and short crura of

the diaphragm to the celiac artery, where it forms,

15. The samilar ganglia. The two semilunar ganglia are united together by numerous filaments, forming,—

16. The solar plexus, which plexus gives off;

17. The inferior stomachic plexus, to the stomach.

18. The splenic, to the spleen.

19. The pancreatic, to the pancreas.

20. The hepatic, to the liver.

21. The cystic, to the gall bladder.

22. The superior mesenteric, to the small intestines.

23. The inferior mesenteric, to supply the large intestines; and

24. The emulgent plexus, to supply the kidneys.

32. The great sympathetic nerve obtains its name from its numerous connexions with the other parts of the body; it is formed by the reflected branch from the second of the fifth pair, and by one or two, and sometimes three small filaments sent down from the sixth pair, while in the cavernous sinus. Upon the surface of the internal carotid artery, while in the carotid canal, the branches of the fifth and sixth nerves form the great sympathetic; they are pulpy and tender, and form a plexus which surrounds the carotid artery; from which the trunk of the sympathetic is most frequently considered as being sent out. After escaping from the carotid canal, the trunk is closely connected, for a short space, with the trunks of the eighth and ninth nerves; and, separating from these, it expands into a large ganglion, termed ganglion cervicale superius, of a long oval form, and situated opposite the second cervical vertebra. From this ganglion the nerve comes out, and descends on the rectus capitis anticus major, behind the sheath containing the carotid artery, jugular vein, and par vagum. At the under part of the neck, and nearly where the inferior laryngeal artery turns towards the larynx, the sympathetic forms another ganglion,

termed by some authors *cervicale medium*, and by others *cervicale inferius*. The ganglion medium is somewhat similar in shape and size to the ganglion superius, though it varies considerably in these respects in different subjects. From this ganglion, branches are sent down, one of which, larger than the rest, and considered as the continuation of the trunk, turns outwards between the inferior laryngeal and vertebral arteries to another ganglion. The third ganglion is placed at the head of the first rib, and is termed *ganglion cervicale inferius*.

The great sympathetic enters the thorax behind the subclavian artery, and sends off a small recurrent twig from behind forwards, round the artery to the adjacent parts. The nerve having passed behind the pleura, runs down upon the heads of the ribs, not in the posterior mediastinum, but externally to it; it forms ganglia between the head of the ribs at the intercostal spaces with the dorsal nerves; branches are given off from about the third, fourth, fifth, sixth, and seventh ganglia, which descend obliquely upon the sides of the vertebræ and unite, forming a trunk; and the *nervus splanchnicus*, which passes between the long and short crura of the diaphragm to the celiac artery, where it forms the semilunar ganglion. The right and left semilunar ganglia are united by a plexus termed *solar*, and from this plexus the several nerves are given off to the abdominal viscera, forming a plexus to each, *viz.*—The splenic, to the spleen; the pancreatic, to the pancreas; the hepatic, to the liver; the superior mesenteric, to the small intestines; the inferior mesenteric, to the large intestines; the renal, to the kidneys; the spermatic to the testicle, consisting of a superior and inferior set of capillary branches, the former derived from the renal, the latter from the lumbar. The great sympathetic still continuing to form ganglia with the remaining dorsal nerves, perforates the diaphragm at its posterior part, and is termed the

posterior great sympathetic, the anterior being the *ramus splanchnicus*.

The posterior sympathetic nerve, after reaching the abdomen, makes a sweep forwards upon the anterior and lateral part of the lumbar vertebræ, between the tendinous crura of the diaphragm, and the *psoas magnus*. It afterwards descends into the pelvis, nearly of the same size as at the superior parts of the body, and passes over the anterior surface of the *os sacrum*, at the inner side of the great sacral foramina; towards the lower part of the pelvis, it becomes considerably smaller, and at last finishes its course upon the surface of the *os coccygis*, where it unites into an arch with its fellow of the opposite side. In the loins, it forms ganglia similar to those in the thorax, each of which is connected behind by two or three long slender branches to the roots of the lumbar nerves, and before, by other slender nerves, to the aortic plexus. In the pelvis also it forms ganglia, which are connected to the sacral nerves on one side, and to the great sympathetic on the other, by cross branches. Filaments are sent off, in the pelvis, from the sympathetic to the muscles and membranes about the *os coccygis*, and to the *intestinum rectum*.

We shall give a few other diagrams with the explanatory text in our next.

An Account of the Beulah Saline Spa at Norwood, Surrey; containing a Description of its Medicinal Properties and Effects, of the Diseases in which it is Remedial, and Directions for its Use. By GEORGE HUME WEATHERHEAD, M.D., Member of the Royal College of Physicians of London, &c. &c. Hatchard and Co.; Joy; Highley. 1832.

DR. WEATHERHEAD'S little tract affords us the pleasing intelligence that within seven miles of London, in a beautiful and picturesque country, we have a spa, which will equal the far-

famed Cheltenham waters. Its effects are said to be those of a mild, yet active aperient, diuretic, and alterative, and consequently it will be found available in many chronic diseases. The spa is embosomed in a wood of oaks, open to the south-west, and surrounded by fine views of the picturesque. From the terraced promenades in the neighbourhood there is a most extensive view, embracing Croydon, Banstead Downs, the Addington Hills, Addiscombe Place, the East India Seminary for Cadets, with Windsor Castle, the Surrey and Hampshire hills, and Sevenoaks, in the distance. What more is needed to render the BEULAH SPA a place of fashionable resort? Ere long, from the exertions of the proprietor, we doubt not that it will combine every thing that is interesting to the invalid, while the beauties of nature, extending for many a mile around, cannot fail to arrest the attention of the tourist, and even of the *ennuyé*.

Conspectus Medicinæ Theoreticæ, auctore JACOBO GREGORY, M.D., *cui adjiciuntur ordo, Translatio et Notæ, ab* J. STEGGALL, M.D., *etc. Editio Altera. Londini: apud E. Portwine, 1832.*

THIS will prove a most useful little work to those students who do not feel sufficient confidence in their knowledge of Latin to enable them to go through the ordeal at Apothecaries' Hall, without some such assistance. The text is placed side by side with the *ordo*, while a good verbatim translation is given below. It contains the first ten chapters, being those in which a student is examined. The text is accurate, and the translation correct:

THE

London Medical & Surgical Journal.

May 5, 1832.

CHOLERA IN LONDON, DUBLIN, AND PARIS.

AFTER all the bitter reproaches, and all the sarcasms of our most scientific contemporary *The Lancet*, it has suddenly turned round on its party and joined the non-contagionists!! The cholera having disappeared, notwithstanding the predications of that periodical, without its having quite depopulated modern Babylon, and the Central Board having lost its occupation, it would be useless to spread alarm any further, simply because the public were no longer gullible. Notwithstanding "the black blood, the pitchy blood, the blue cholera, the devastating pestilence, and Daniel "De Foe's authority," *The Lancet* has become a non-contagionist!!! Never did a medical periodical, or a party, betray more ignorance of the history of epidemic and contagious diseases, than our contemporary, its twin brothers the Cholera and Medical Gazettes, and the *few* who held that the late epidemic, mis-named cholera, was contagious. It is quite lamentable, deplorably humiliating to acknowledge, that the medical press of England should be conducted by persons with slender pretensions to medical erudition. This arises from committing it to the management of medical students, and youths just let loose from school; and to others almost as superficially acquainted with the his-

tory of medicine. If we look to France we do not find a single periodical, though there are more than twenty, in support of the contagiousness of cholera, and yet the disease was infinitely more fatal in Paris than in London; nor do we find a single physician or surgeon of any repute in Paris, indeed, not a single individual, of a different opinion. It was left to a part of the London medical press to stultify itself by such a conclusion. We say a part, because all the London and Edinburgh journalists of most weight had preceded their contemporaries in France in a correct and natural conclusion. There is now but one journal in Great Britain the advocate of contagion, and that, we predict, will obstinately adhere to its former principles! In Dublin the Board of Health has, as a matter of course, followed its sagacious parent in London, and cholera is declared to be contagious, and all the consequent horrors inflicted upon a most excitable populace. When we consider the great disgrace inflicted upon the faculty by the London Board of Health, and the contempt and scorn shewn by the public in consequence, together with the horrible charges lately made by the *canaille* of Paris, we are not surprised that the unfortunate poor of Dublin should entertain a dread of medical men, and be guilty of many excesses; but still, with all their faults, they have not as yet proceeded to the lengths of the Parisians. We are pleased to see the wise and benevolent interposition of Archbishop Murray in disabusing the people of

Dublin of their unjust and groundless apprehensions as to the intentions of the Government and of the Faculty. The pastoral address of that pious and revered prelate will have more effect in tranquilizing popular alarm in Ireland than any measure that could be adopted. As yet the cholera has not caused a great mortality, and if we reflect upon the mysterious course of epidemic diseases in all ages and countries, it appears to us, notwithstanding the great predisposition or liability of the Irish to the cholera, it may, like thousands of other epidemics, suddenly disappear; or effect much less mortality than on slight consideration might be expected. In our last Number there was ample proof of this statement afforded in the article on the epidemic diseases of Ireland, by which it appeared, that the devastating pestilence of 1348, which was so fatal in every part of Europe, and especially in England, was comparatively limited in its effects on the inhabitants of Ireland. In the present instance, time alone must determine the correctness or incorrectness of our assertion. There is one thing, however, quite certain, that the poverty and wretchedness of the poor of Ireland ought to be immediately ameliorated or removed by the Government or the Legislature. Some measure should be adopted speedily for this purpose. Let any sensible man reflect upon the state of a famishing people, who have no means of subsistence, save the charitable donations of the very few affluent individuals

who are bound to witness their distress, and ask himself, should such a state of things exist in a civilized country? Let him remember, that an unemployed people, when seized with disease, have no pecuniary aid from any quarter, save from those who reside in their vicinity, to whose scanty means humanity makes hourly appeals. Under such circumstances the probability is, that cholera will be an exterminating malady in Ireland; unless, like all epidemics, it may suddenly cease or slightly affect those, who, to all appearances, are most predisposed to its invasion.

We are grieved to observe the members of the Dublin Board of Health rank contagionists. When we consider the individuals who compose that body we are, however, by no means surprised; because, in every profession and trade will be found creatures, who worship the powers that be. The Government of Ireland imitates the Government here in every thing, and as we have been duped by those, whom a contemporary has designated "lying, intriguing, deceitful, cozening knaves," their example must be followed at the other side of the Irish channel. Had cholera been considered non-contagious in London it would be non-contagious in the eyes of officials in Dublin, and *vice versa*. The official Boards in Edinburgh, Sunderland, and every where else, were equally accommodating. The promotion of science is not the object with such minions; the fame and the renown of the faculty are sacrificed,

the crawling slavish submission to power preponderates, and our noble profession is represented as a century behind that of our foreign contemporaries. We cannot be surprised at this state of things when we consider the condition of the faculty in this kingdom, which we are ashamed to admit is placed in a situation by antiquated laws which is a disgrace to the country, and an atrocious outrage upon common sense and upon public taste and feeling.

In no civilized country on the face of the globe are the laws relating to the practice of the medical profession so defective as in this. It cannot be otherwise, for these laws were enacted more than three centuries ago, and are no more suited to the wants of society in this age than to those of the inhabitants of the moon.

Our medical corporations are composed of individuals who are placed there by interest, and not by scientific acquirements. The natural consequence is, that the medical community entertain little or no respect for these drones. An alarming epidemic prevails, a Board is formed in which the faculty place no confidence, and the ignorance of which is even exposed by the public. Were such a Board composed of the most scientific and experienced physicians in the metropolis it would be supported by the faculty at large and the public. This Board having, as a matter of course, failed to obtain public or professional approbation, is forthwith dissolved: another is erected on its ruins consisting of three army sur-

geons, two of whom were never heard of before, and these are to represent the profession in Great Britain! Was there ever such preposterous conduct displayed in any other country? Have three of the most celebrated physicians of Paris been constituted into a Board, as the representatives of the entire faculty of the country? No, no—the faculty of France would not submit to such a gross and unparalleled insult; and look to the happy results of really scientific physicians having been consulted on the appearance of cholera in Paris. There the most illustrious physicians and surgeons proclaim and publish to the world their opinions on the nature of the disease; the public and the profession have the fullest confidence in such opinions. No unnecessary alarm is excited, no quarantine, or destruction of trade and commerce is inflicted upon the nation; the condition of the poor is improved, and medical science is beneficial to humanity. What a great contrast there is between the London and Paris Boards of Health! How different the conclusions upon a question of science! But there is no difference of opinion between the faculties of England and France, it is merely between the Boards of Health—the one being legitimate, and the other being a forced and unnatural incubus upon the profession.

We were a good deal amused by the error into which a certain Journal had fallen last week, in announcing C. Broussais as a contagionist, and author of the new medical doctrine. The celebrated physician is a non-contagionist, and father of the former.

MR. CORY ON CHOREA.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

SHOULD the following case possess sufficient interest to be worthy of insertion in your valuable and scientific Journal, by so doing you will confer an obligation upon

Your obedient servant,

EDWARD AUGUSTUS CORY.

Camberwell,
April 24th, 1832.

CASE OF CHOREA SANCTI VITI.

MARCH 29, 1832.—Mary Wood, ætat 9, of a habit of body inclining to the leucophlegmatic kind, has been ill three months, with symptoms marking the existence of chorea sancti viti. The disease appears to have first manifested itself after a fright, and to which cause her mother attributes the origin of the complaint. She is of an affectionate disposition, but is rather irritable, and very easily excited. The motion appears to be more frequent in the arms than in the lower extremities; which latter, however, often become affected, particularly in the act of walking, when she falls to the ground, being unable to sustain the necessary balance.—There is an almost constant twitching of the face and eyes. The muscles concerned in progression pay so little obedience to the stimulus of the will, that when she attempts to run forwards she is almost invariably impelled in a lateral direction. The process of deglutition is performed with considerable difficulty. There is a pain in the right hypochondriac region, and she also occasionally suffers pain of the head in the frontal region. She articulates words of some length rather indistinctly, but can generally manage to make herself understood. Her bowels are said to be tolerably regular, and the feculent evacuations partake rather of the scybalous character. The mental powers are not impaired in the slightest degree, and

she is gifted with a tolerable development of the intellectual function. There is an occasional deep sigh, which is considered by some writers as characteristic of the disease. There is also a scanty secretion of urine, and she is not able to retain it for any length of time. Her appetite is good, and she complains of feeling drowsy, particularly in a morning. Her tongue is clean, and pretty constantly in motion, and she experiences great difficulty in conveying food to her mouth. When any thing occurs which in other persons would produce a smile, in her it excites loud laughter. She has some part of her body almost constantly in motion, excepting when she is under the influence of sleep. She is frequently disturbed by dreams of an unpleasant nature. She expresses uneasiness and great dislike when any one laughs at her ludicrous movements.—Habeat pulv. aloës. socotorin. gr. iij. et pulv. ipecac. gr. iss omni nocte. et etiam ferri subcarbon. gr. x ter in die sumend.

April 2.—There is no obvious improvement, and from some neglect, on the part of her mother, she has not taken her medicine regularly.

April 6.—The motions of the arms are less, the twitching of the face and eyes has abated considerably, and she does not fall down so often when she walks.—Reptr. pulv. aloës c ipecac. et capiat gr. xv ferri subcarb. ter. die.

April 17.—She is considerably improved in her general health and appearance, and all minor symptoms have disappeared. She now scarcely ever falls when walking; the irregular action of the muscles of the face has entirely ceased. Her power of deglutition is very little impeded, she seldom complains of pain in the head, and her appetite continues good. She can carry liquid contained in a vessel to her mouth without spilling it, which she was not able to do before.—Perstet in usu pulveris aloës c; ipecacuanhâ omni nocte, et augeatur ferri subcarb. ad ʒj. ter. die.

April 23.—She appears perfectly

recovered, but it is deemed advisable that she should, for a short time, continue the use of her medicine.

REMARKS.

It is considered that the above case is interesting, in as far as it exhibits a combination of the two modes of treatment, a separate perseverance in which have been found most generally successful in modern practice. The purgative plan found an able advocate in the celebrated Hamilton of Edinburgh, who solely depended upon cathartics for the cure of this complaint; and his opinions are supported, and his practice followed, by many able men of the present day; for it was the opinion of that eminent physician, that it was possible completely to eradicate the disease by a steady continuance in the use of purgative medicine.

Many men have doubted the success of the Hamiltonian mode of treatment; but I am convinced it is entirely because they do not bear in mind the precise object to be held in view in its administration. It is not by purgatives of the drastic character that we can expect to cut short this singular affection, and to remove the scybalous matter from the large intestines, upon which the apparent peculiar muscular irritability, which constitutes this disease, in some measure seems to be dependant; but an indication of this kind is only to be answered by a continued perseverance in remedial agents, which exert a distinct action upon those parts, by which means we can alone hope completely to remove this hardened feculent matter. Medicines of the aloetic kind have been found better calculated to fulfil this indication than any other, and by the addition of ipecacuanha to the aloes a very effectual combination is formed for that purpose. The relative doses of the two, for an adult may be, al. gr. vj. ipecac. gr. ij. This should be given every night, or every other night, as circumstances may require; and if a diarrhoea should arise it is to be checked by astringents of the creta-

ceous kind, and that having ceased the purgative must be again had recourse to, and unremittingly continued until all the scybalæ have been expelled, which sometimes will require a long period for their complete evacuation. Dr. Whiting (whose talents as a lecturer and practitioner are too well known to need any comment from my humble pen) invariably depends upon the purgative plan as recommended by Hamilton. Dr. Elliotson gives large and frightful doses of carbonate of iron, and with perfect success; and some physicians place particular dependence upon preparations of zinc. In the present case I was induced to persevere in the use of the purgative and tonic modes, in conjunction, more especially, as the faces partook of a scybalous character; to the favourable result of which, however, any further allusion is unnecessary.

The disease now under consideration has been noticed by some of the earliest medical writers with whose works we have been made acquainted, and some of its effects, as related by them, are really so extraordinary and extravagant that they cannot be credited at the present time. Boys and girls (more frequently females) about the age of from seven to fourteen appear to be more subject to this affection than adults, although the latter are occasionally attacked with the complaint. The faculties of the mind do not often become impaired, and it is only when chorea has existed for a long period, and curative means of every kind have been resisted, that a fatuitous state becomes induced. The muscles appear all disobedient to the stimulus of the will, and it appears that the voluntary muscles alone are under the influence of this disease. Patients affected with chorea sancti viti always express great dislike when any person laughs at their ludicrous movements; and it is exceedingly cruel and absurd to do so as it hurts their feelings, and tends considerably to aggravate the disease; and it is, therefore, advisable not to

appear to notice their ridiculous postures. An overloaded and scybalous state, as to the contents of the bowels; agitation of mind, or any common excitement, may produce this disease, provided a predisposition to it exists. The remedies which have been had recourse to, from time to time, for the cure of this singular complaint are numerous, and many are too useless to require any comment; suffice it to say that tonics, more particularly of the metallic kind, and purgatives have been found most successful. Cold and warm bathing, the shower bath, Galvanism, and electricity, have all their advocates, and there is no doubt but they have occasionally been of service. I am rather diffident with regard to venturing an opinion as to the nature of this affection, or upon what its peculiar essence may be dependant; it is, however, certain, either that an inordinate irritability of muscular fibre exists, or that there is an inordinate increase in the principle of volition. I am not one of those who are fond of indulging in fanciful and ephemeral hypotheses, for I conceive that all speculative opinions rather tend to retard than promote the advancement of medicine, and the consequent interests of suffering humanity. *Ars medica tota est in observationibus*, says Baglivi, and it must be admitted that it is upon observation alone we must rest the foundation of the science, if we hope ever to raise it to a state of comparative perfection; if we do not its fabric will be supported upon a tottering basis, and it will not be able to withstand the batterings of future and more enlightened ages.

MUSCULAR CONTRACTION.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

As I am well aware that this so long continuance of the discussion on my hypothesis, must be growing very

tiresome, I will in this, which you hint is to be the last letter on the subject, be as brief as possible.

If my hypothesis did not differ from others on the subject of nervous motor influence, and from Sir Charles Bell's among the number, it would have been ridiculous to publish it. E. B. appears to think that, because I made use of an expression of Sir Charles's in my first letter, I am incapable of dissenting from any thing bearing the sanction of his name. E. B., by so triumphantly quoting against me Sir Charles Bell's opinions, seems to consider them as incontrovertible, and as having finally settled the question of the mode of operation of motor nervous influence; but, unfortunately, that justly celebrated physiologist does not think so himself. In a lecture delivered at the Royal College of Surgeons in London, on Saturday, April 21st, Sir Charles Bell, after saying that the question could never be settled, actually added—that he had been led to suppose that *relaxation* might be the act, and not contraction; and that physiologists, in studying the subject, had too much neglected the consideration of the mode by which relaxation is effected.

I agree with E. B. concerning the difference between the governance and the party governed, and beg to illustrate this difference further, by instancing the horse and his rider, which may illustrate our purpose as well as the steam-engine. How does the rider govern the too ready disposition of his horse to bound wildly away with him? By means of the bridle—the “restraining influence” of the bridle and bit. When he wishes a fiery horse to move, he withdraws the restraining influence—he slackens the bridle, and the horse, being left to its own natural impulse, darts off with him. The horse is the muscle, the bridle and bit the nerve, and the rider the power of volition. E. B. may meet me here, by saying that some horses want spurring; but such horses will not suit my purpose,

they must, like a muscle, possess an *inherent and natural tendency* to act. Mazeppa was not provided with this restraining influence, and his horse acted till it died.

E. B. still will have it that the tonic contraction of the muscles of the dead body depends on their cooling, adding, that the term is as properly applied to the cooling of a piece of iron. That the muscular contraction which causes the body to stiffen is very different from that which all inorganic bodies undergo on cooling, E. B. himself unconsciously acknowledges, when he says that the contraction ceases as soon as the structure of the muscle becomes changed; for though change of structure may, and does, deprive the muscle of its *organic* properties, I cannot see that it destroys the properties which, as *inorganic* matter, it has still a right to possess; the muscle is still *matter*, though its *structure may be changed*. I consider the stiffness to be dependant on the remains of an *organic* property. The organic properties of animal matter continue until change of structure takes place; and as it is probable that this change of structure takes place in the medullary part of the nerves sooner than in the muscles, the latter retain their properties longest. While, then, the nerves are gradually losing their restraining power, the muscles uniformly contract; and when, in process of time, the muscles lose their properties, the contraction, and consequent stiffness, cease. In persons killed by lightning and electricity, by the bite of a venomous animal, by acid vegetables, by excessive fatigue, &c. this stiffening does not take place, although the body grows *cold*. Here the muscles lose their organic qualities as soon as the nerves, as sufficiently evidenced by the very rapid decomposition which takes place; but nothing occurs to deprive them of the properties which they possess in common with all other inorganic matter. Again, the sort of contraction supposed by E. B. to produce stiffness, would not

be sufficient for the purpose, for the bones would shorten as well as the muscles, and, perhaps, in a greater proportion. But E. B. had better consult some work on general Anatomy for information on this subject.

If E. B. will take the trouble to refer to my first paper, he will find it stated, as my opinion, that the restraining influence (which is the "burden of my song") resides in the *extremities* of the nerves, and is not derived from the brain. Now, as the accident or morbid affection producing paralysis takes place on the *origin* or *course* of the nerve, a property residing only in the termination of the nerve need not, of necessity, be destroyed in consequence;—so that in paralysis, "the power which prevents contraction" is *not* "withdrawn," according to E. B.'s misrepresentation of my mode of accounting for the disease; the effect is produced by the nerve no longer being able to communicate the shock which is to suspend that power. Dr. C. Henry, it is true, found the muscle continued relaxed on the application of narcotics to the muscular extremities of the nerves, but how could he so apply his narcotics without narcotising the muscle itself?

E. B. says that isolation from the brain leaves to a nerve no other properties than those which a cord possesses, and that the conducting of an electric shock along this cord will produce contraction. He says, too, that "muscles possess no contractile power independent of nervous influence."—How can we reconcile such an obvious contradiction? He first deprives a nerve of its vital properties, (for such he asserts is the effect of its isolation from the brain,) and then by means of electricity, or some other irritant, he produces through its medium an effect on the muscle, which, according to him, can take place only with the assistance of the very properties of which he confesses he has deprived the nerve. According to my hypothesis, which E. B.

does not seem to understand, the phenomena are thus accounted for. The restraining influence, not being derived from the brain, is not withdrawn when the nerve is isolated from it, but the power to *suspend* that influence is removed; and, in order to produce contraction, the shock which is to be the substitute for volition must be applied before the injury.

In concluding this subject I may be allowed to observe, that the existence of irritability (which may be defined susceptibility to take on increased action,) with nervous debility is easily accounted for, when we consider that the weaker the nerve the less will be the shock required to cause suspension of its influence. Spasm is attributed, in some instances, to excess of blood, in others to want of blood, in the nerves; either will deprive the nerves of its properties; in like manner we see the functions of the brain suspended by the equally opposite conditions of syncope and apoplexy.

Considered as mere hypothesis, I do not conceive myself bound to make my opinions consistent with the theories of others, as E. B. seems to expect me to do; surely it is sufficient if they are consistent with one another, and with known facts. E. B. says, that nature, in employing the contrivance I suppose, would be deviating from the perfection displayed in all her other works. If he is an astronomer he will know, that the regular motions of the heavenly bodies are produced by the centripetal force being constantly in exertion to counteract the centrifugal force, and the centrifugal force to overcome the restraint exercised over it by the centripetal. This, I think, is as splendid and as *perfect* an instance of the contrivances of nature as can be produced; and yet it seems to be, in some respects, analogous to my poor hypothesis, the "clumsiness" and inconsistency of which, with the other works of nature, E. B. says, consists in this,—"that the nerves are kept in a constant state of exertion to re-

strain the action of the muscles, and the muscles to overcome the restraint exercised over them by the nerves."

I remain, Gentlemen,

Your much obliged

and obedient servant,

April 23, 1832. R. U. WEST.

THE ONLY PRECAUTIONS FEASIBLE AGAINST THE CHOLERA.

By A. THOMSON, M.B.

It is impossible to leave one's house without hearing on every hand the echo of the tremendous scourge now devastating Europe with a caprice, and wantonness, rarely evinced either by the epidemic, or the contagious affections hitherto familiar to European medical men. It leaps from place to place, from spot to spot, from cottage to palace, from cradle to couch, with the electric twitching of the lightning; like it leaves but its traces; the one scathes matter, the other life. How goes cholera? Any new deaths? Is it contagious? Is it epidemic? Is it a religious punishment? are, therefore, the natural, but starting, questions that buz around us at every step. The fearful eye looks about in search of, the ear listens for, and the mind in vain reasons upon, this stealthy destroyer of the human race. In vain do we reason, in vain hypothesize, in vain observe; all that is known from the combined observations of the learned, and the ignorant, is the symptoms marking it, the *certainty* of its killing in the long run from one to two in every three attacked, the *uncertainty* of its proximate victim; this is the sum of the multiplied results of human anxiety and research. No lesion explanatory of death, no change in the tissues or in the fluids pervading and traversing them, has resulted from the most painful, patient, and minute researches. The brain, the spine, the breathing, the digestion, the blood forming and moving portions of the body, have been in vain interrogated by the combined skill of the

most enthusiastic philosophers and philanthropists. Nothing, absolutely nothing, constantinvariable, or usually deemed adequate as a cause of death, has been traced. It is the *ultima thule* of medical knowledge; it is the point at which science is at fault, and observation has found no kebla in the heaven of its territory. Hence comes it that no rational treatment, none founded upon the knowledge of causes, or changes of structure, or tendencies to the change of the vital machinery, can be formed. And hence comes it, that exciting and depressing remedies, of every type and character, have been given with the hope of finding some chance specific, or counteragent, but in vain. The honest physician hangs his head, and, acknowledging his inefficiency, tries his remedies rather to sooth the mind of his patient than with hopes of success. How ridiculous, then, the camphor bags, the opium pills, the chlorine waters, the nostrums and nonsense, that crowd the drawing-rooms of the timorous, and enrich the treasures of each bold and heartless empiric! How fantastic the brandy and water regimen how childish to see the big man change his habits into those of the puling infant, and trembling at each puff of the spring zephyr, wrap himself in flannel, and encumber himself with a portable apothecary's shop! One and but one series of means can be of any earthly use; those which will, to the best of our power, MAINTAIN THE ORDINARY STATE of health, whether florid or depressed, or otherwise. For, in all known epidemics, and contagions, the predisposing circumstances are not the ordinary habits, and such, as by being ordinary, have had the nerves tuned, and accustomed to their influence; but EXCESSES OF ALL KINDS; sudden changes, however simple, in the ordinary habits, or propensities of the patients. The heat of balls, the stupor, or intoxication of an orgie, the surfeit of the gourmand, the gratifying of the casual caprices, and whims of appetite, the supervention of inordinate joy, or unusual fear, prolonged watch-

fulness, sittings up to unusual hours, irregular fits of temper, and whimsical changes in the density of attire; these, and these only, are the circumstances, that by agitating and disturbing the equilibrium of the blood-moving and sensation-conducting apparatus, set up fever in the frame, a wild, and wanton play of the vessels, and pumping of the heart, that needs but the directing influence of an epidemic, or of a contagion, or of the exciting cause of any derangement, to determine the formation of absolute disease, to bring this disturbance to bear upon a given spot. Whether, then, this complaint be infectious, or contagious, such are the causes that can alone, as far as our knowledge hitherto goes, predispose to its acquisition. Whatever debilitates the nervous energy, whatever exhausts it in an unusual manner, deprives the system of that which it needs for its habitual functions, necessarily introduces imperfections, more or less traceable, into the apparatus for these functions, and by so doing throws the individual more immediately beneath the yoke of disease. The man, who has been accustomed to drink wine, take coffee, smoke, snuff, walk, eat; or love, let him gaily continue his customary habits; for it is a most incontestible fact, in medical science, that the sudden leaving off of a contracted habit is a sure source of debility, and thence as certain a predisposer to disease, as the excess of the rake, the stripling, or the innocent. Calmness, regularity, habitual custom, such are the circumstances conducive to all true health. The sudden putting on, then, of flannel belts, of weltd clothing, the change from wine to brandy and water, from two pounds of food a day to one, must be calculated to predispose to, if not to produce, the disease by disturbing the equilibrium existing in the system. Lastly, forget, as much as can be, the possibility of being attacked, banish your fears, your agitation, your anxieties, give up your nostrums, burn your camphor, and bottle up your chlorine, lest by all this hubbub in the mind,

this hurly-burly of thought, and feeling, you succeed in depressing your spirits, and depriving yourselves *à priori* of the tonic, and invigorating effects of hope, and embitter unnecessarily what few moments of existence may remain. Camphor, ammonia, chlorine, opium, tea, brandy, all these nostrums have decidedly different effects upon all known material substances, and, therefore, cannot, one and all, ward off the same disease, or cause of disease. To give a probability, all of them, then, must be carried about one; or the choice, and the selection, in the actual state of the science, is as blind a hazard as the turning of a die. Courage, then, my friends, in the midst of this threatening, and awful visitation! If science makes any real discovery, be sure that fame's loudest blast will waft it, with the rapidity of the thunder's march, from one end of Europe to the other. Follow, then, in confidence your occupations, AVOID EXCESSES, mental, and bodily, CHANGE NOTHING, not even from the town to the country air, and leave the rest to the inscrutable dispositions of the Power, that has hitherto baffled all our science, and to the intense anxiety of every well meaning medical man to distinguish himself by his successful treatment of this capricious visitor.

Your sincere well wisher,

ALEX. THOMSON, M. B.

Of St. John's Coll. Cambridge; of the University of Edinburgh; and late of the University of London.

43, Rue de Monsieur-le-Prince,
aupres de l'Odeon.

[The above remarks were addressed to the English *who* resided in Paris when cholera appeared in that city; and reflect much credit upon the author as a scientific physician and philanthropist.—We shall insert Dr. Thomson's graphic description of the Necrotomic Appearances in Cholera in our next.]

Westminster Medical Society.

Saturday, April 28th.

Mr. CHINNOCK in the Chair.

THE minutes having been read, Drs. Blicke, Gilkrest, and Webster denied their accuracy, after which Dr. Blicke proceeded to inquire whether the reporters attending the Society were under the surveillance of the Council?

The President answered in the negative; when Dr. Blicke regretted that such was the case, because the reports were frequently inaccurate. In the report in the *Times*, he was described as having said that habitual drunkenness prevented an attack of cholera, whereas the contrary was the case.

Mr. Greenwood recapitulated his previous arguments in favour of contagion. He stated that he had regretted the hasty conclusion to which the medical men of Paris had come, and he had now reason to believe that they had changed their opinion. He alluded, then, to two lectures delivered by the celebrated Broussais, who had given such a tone to the medical doctrines, in which he stated his belief that cholera was propagated in the same way as small pox.

Dr. Gilkrest had in his possession the lectures alluded to by Mr. Greenwood, and he read extracts from them: the concluding paragraph was to the effect that, from *the facts previously narrated, he (Broussais) could not believe that cholera was propagated in the same way as small pox.*

Dr. Johnson wished to condole with Mr. Greenwood on his misfortunes. He first lost Broussais as an ally, and this day the *Cholera Gazette*, which joined the non-contagionists previous to its death for the want of cholera, or rather for the want of somebody to advocate contagion. The *Lancet* also had this day joined the non-contagionists.

Dr. Sigmond made several observations in support of the epidemic

nature of cholera, and was followed by Dr. King, Mr. Hunt, M. Saunier, and others, whose remarks we are compelled to omit for want of space.

Dr. Granville proposed that a declaration should issue from the Society to the effect that, after six months of impartial and dispassionate examination of all the facts brought forward before it, the majority of the Society had come to the conclusion that the disease was not contagious, and that it was propagated in the same way as all other epidemics were.

A most violent and stormy discussion instantly ensued. It was contended that it was illegal and unfair, but it was proved that there were two precedents for it. The question was put, whether Dr. Granville's declaration should be submitted to the Society or not, previous to which visitors were ordered to withdraw. It was carried, and Dr. G.'s declaration was on the point of being put, when Mr. Burnett moved an amendment, that the Society do instantly adjourn, which was lost. The declaration was finally put, and, after a great deal of noise and confusion, carried. The parties voting held up their hands; tellers were appointed, they went into the middle of the room, were sent to different sides, and yet all would not do. Many of those who voted against it, on the ground of irregularity, expressed their willingness to sign the document afterwards.

The President expressed his entire concurrence in the conclusion at which the Society had arrived; but he protested against it as unfair and illegal, and especially as no notice of it had been given, so that most of the members were uninformed as to the occurrence of such a proceeding.

[As members of this Society, and deeply interested in its welfare and prosperity, we must, with the most kindly feelings, censure the manner in which the meeting conducted itself during the votes on the declaration. The conduct displayed by the defeated party was by no means what it ought to have been.

Hospital Reports.

ST. GEORGE'S HOSPITAL.

Aneurism of Femoral Artery in the Groin.

March 1.—On this day Mr. Brodie performed the operation for aneurism of the femoral artery. The man had been sent to the hospital a few days previously by Mr. O'Reilly, from Windsor. The aneurism was a very large one, and Mr. Brodie took up the external iliac artery high up in the groin. So urgent was the immediate necessity for performing it, that the skin over the tumour gave way upon the man being laid upon the table; the jet of arterial blood was however small, and it was instantly repressed by Mr. Keate holding a cold wet sponge over it until the vessel above was secured by a ligature; the pulsation of the tumour could be most distinctly seen from the upper benches of the operating theatre. Previous to the operation Mr. Brodie remarked, that "there were two circumstances which would render the operation a difficult one: first, the circumstance of the aneurismal tumour being situated above Poupart's ligament; and, secondly, the possibility there was that the external sheath of the vessel might be inflamed, and consequently agglutinated to the surrounding cellular texture. The operation was performed with great skill. Mr. Brodie, in this case, adopted Mr. Abernethy's plan of dividing the abdominal muscles high up, and pushing the peritoneum inwards from the course of the external iliac: an aneurismal needle was passed under the artery, and it was tied. The operation lasted twenty minutes from the time of the first incision until the wound was closed; there was but little blood lost, and the man bore the operation remarkably well. When the man was carried out of the theatre, Mr. Brodie remarked to the pupils, that the case

was one of great interest, and would well repay the attention which any pupil might give to it. The man had given two very different histories of his case. The first account he heard had led him (Mr. B.) to believe, that the case was one of medullary tumour, lying over the artery, and, consequently, pulsating with it; but, on further reflection, and cross-questioning the man, he was led to the conclusion (which the result of the operation had tended greatly to strengthen), that the tumour was aneurismal; he had, therefore, performed the operation as they had seen, for he really had no other course left him to pursue. The artery had been tied, the tumour had sensibly diminished in circumference, and all pulsation in it had ceased; therefore, whether the tumour was aneurismal or medullary, in either case the operation had answered the end for which it was performed.

March 3.—On visiting the patient this day we found the man going on remarkably well. Mr. Brodie remarked (speaking on the supposition that the tumour might prove a *medullary one*), that a case had been received in the hospital, in which an artery had been ruptured in the substance of the liver. A pulsating tumour had formed, which in the course of time burst, and the patient died. With reference to the last remark of Mr. Brodie's, we are at a loss to connect the chain of evidence between the medullary tumour in the one case, and the aneurismal tumour of the liver in the other; and we shrewdly suspect, in our own mind, that there is what some anatomists would term "a solution of continuity" between them.

It would be needless to enumerate, from day to day, the appearances which this case presented: the aneurismal tumour sloughed away but no hemorrhage took place; the thigh was supported from the knee upwards with adhesive strapping; a compress and bandage were placed over the tumour, which was dressed with dos-

sils of lint dipped in tinct. benzoin comp., and the place where the artery was tied was dressed with simple cerate. There was also a leather strap and pad placed over the tumour, which could be tightened at pleasure, and thus instantly arrest all hemorrhage whenever it should occur.

For three weeks after the performance of the operation no hemorrhage whatever took place, and Mr. Brodie, and every one connected with the hospital, as well as the friends of the patient, were most sanguine in their hopes of the man's speedy and complete recovery.

About the twenty-fourth day after the operation, hemorrhage came from the upper part of what had been the aneurismal tumour. Mr. Brodie was summoned in haste to the hospital, and stopped the hemorrhage by pressure. A few days afterwards it again returned, and again it was stopped by the same means; but the man never rallied from these two shocks; his pulse became quick and irritable, his tongue dry, his countenance anxious. Opium was given to quiet and soothe this unnaturally irritable state, but in spite of all that the greatest care and attention could do for him, the man died on the 15th of April.

On examining the body after death it was discovered that the circumflex, or iliac artery, opened into the upper part of the tumour, which no doubt caused the secondary hemorrhage; fluid was effused into the right knee joint: abdomen healthy—head and chest not examined.

GUY'S HOSPITAL.

Concussion of the Brain—Discharge of Blood and aqueous Fluid from the Ear—Recovery.

CHARLES GOADWYN, ætat 18, was admitted under the care of Mr. B. Cooper, Jan. 27.—On yesterday he fell from the mast-head of a small vessel in the river; immediately after which accident he vomited blood, and bleeding took place from the nose and ear. These symptoms were

speedily followed by insensibility, which has continued to the time of his admission. He is now in a state of collapse; the extremities are cold; pulse irregular, varying from 45 to 80, pupils dilated; severe pain in the head. There is a considerable sanguineous effusion under the scalp, which, on pressure, gives a sensation as if there was a depressed fracture of the subjacent bone.

R *Ext. Colocynth. C.*, gr. viij;
Hydrarg. submur., gr. iij;
in pilulas duas divide, statim sumendas.

Let him have lemonade for drink.

Evening.—Re-action has taken place; pulse hard.

V. S. ad 3xij.
Rep. pilulæ, et habeat postea, haust. sennæ si opus sit.

28.—Bowels opened; pulse 70; regular; about half an ounce of aqueous fluid has escaped from the ear, which, on analysis, was found to contain water, albumen, mucus, and the muriates; it was not coagulable.

Habeat hyd. subm. gr. i; Atis horis.

29.—Pain in the head undiminished; pulse fuller and harder; tongue furred; bowels opened; three dejections.

V. S. ad 3vj.

The pulse was rendered softer by the venesection; but towards evening it was repeated to the extent of eight ounces.

Pergat. in usu hydrarg. subm.

30.—Pulse softer; in other respects, as at last report; discharge continues.

Pergat. rep. haustus sennæ.

Feb. 1.—Pain increased; strabismus of the left eye.

App. empl. lyttæ nuchæ.—pergat.

3.—Aural discharge has ceased; pain in the head was at first relieved by the blister, but is now severe; bowels opened. Ear to be syringed.

From this date he continued to improve, and left the hospital at the end of February perfectly cured.

FUNGUS OF THE TESTICLE—EXCISION—CURE.

John Warte, ætat 24, was lately admitted in Stephen's ward, under Mr. B. Cooper. About five months previous to his admission he received a severe blow on the scrotum, which was succeeded by violent inflammation and suppuration. There is now a fungus on the right testicle about the size of a hen's egg. He complains of dull pain in his loins. His general health is excellent. Mr. Cooper does not consider the disease malignant, and thinks it a favourable case for excision.

The bowels having been properly regulated, the disease was removed by excision, unattended by hæmorrhage. The usual dressings were applied, but on their removal it was found that union, by the first intention, did not take place. During the treatment it became necessary to apply the ung. hyd. nit. oxid.; cicatrization rapidly took place, and he left the hospital at the end of a fortnight after the time of the operation, completely cured of his disease.

ST. MARY-LE-BONE DISPENSARY,
Welbeck Street, Cavendish Square.

CASE OF TIC DOULOUREUX, TREATED
BY THE SULPHATE OF QUININE.

ANNE JOHNSON, ætat 28, admitted under Dr. Sigmond, April 3, 1832, complains of pain over the left eye, extending up the forehead, and down the cheek; it comes on the first thing in the morning, and lasts for three or four hours; it has sometimes waked her in the night. The pain is very excruciating, shooting in various directions. The eyelids occasionally swell; bowels regular, tongue clean, pulse natural.

The disease being evidently intermittent, two grains of the sulphate of quinine were given twice a day.

7. A little better. Rep.

14. Improving. Pergat.

16. Pergat.

21. Is considerably improved. Has passed a week without pain. Pergat.

Cured.

STRYCHNINE IN CHOREA.—Dr. Sigmond has given an extensive trial to the use of strychnine, administered internally in St. Vitus's dance, and with considerable success. The dose of the medicine given was an eighth of a grain twice a day in a pill. He has never seen it produce any unpleasant effects. This confirms the experience of Dr. Bardsley.

USE OF THE CROTON OIL.—M. Andral has given an extensive trial to this powerful medicine in the wards of La Pitié. He has found it administered internally of great advantage in various affections, and it appears has not had to regret any ill effects from it. Employed externally by friction, without desquamating the cutis, it appears to act as a powerful revulsive and counter-irritant, but it is expressly stated, that employed in that manner it did not act as a purgative. He did not use it in enema.—*Bull. de Therapeutique Medicale.*

SECALE CORNUTUM AND INJECTION OF THE PLACENTA.—M. Delaporte, D.M. of Vimontiers, Orne, details a case of twins, in which the secale was freely employed with the effect of causing expulsion of the infants; but there apparently its utility ceased, the placenta did not come away. At last he determined to try the plan of Mayor, and accordingly injected 8oz. of a cold acidulated fluid at twice, by the umbilical vein, when a small placenta, having two cords attached, was speedily expelled.—*Bull. de Therap. Med.*

Medicinal use of Holly-leaves.—The Medico-Botanical Society of London has awarded its silver medal to Dr. Rosseau, for his essay on the effects of holly-leaves in fever. The author details several cases of intermittents which were cured by this remedy. He denominates its alkali ilicine.

BOOKS.

THE Substance of the Investigations regarding Cholera Asphyxia; with Cases and Dissections communicated by Professor Delpech and Dr. Coste, of Montpellier, and Dr. Lowenhayn, of Moscow during their residence in this country. To which are added, Observations on the Disease in Edinburgh and the Neighbouring Districts, with numerous Cases and Dissections. By JOHN LIZARS, Professor of Surgery to the Royal College of Surgeons, Surgeon to the Royal Infirmary, and one of the Medical Officers of the Cholera Hospital, Drummond-street, Edinburgh. 8vo. pp. 72. Edinburgh, 1832. J. Hamilton.

"It is as free of contagion as a cut finger or an amputated limb."—Preface.

This is the essay which led Lord President Hope to insult Professor Lizars, publicly, as stated in a former Number; and which outrage was, in a great measure, sanctioned by the cringing, crouching Medical Members of the Board, who afterwards, in their places at the Medico-Chirurgical Society, displayed the grovelling inconsistency of annulling the encomium they had bestowed upon the author at a former meeting. Oh! Abercrombie, Alison, and Gregory, the descendants of an illustrious line, as independent as the wild heath that riots over thy native land, have ye achieved this ignoble deed? Have ye, too, bowed down and worshipped the golden calf? Oh! shade of the author of *Conspectus Medicinæ Theoreticæ*; thy mortal representative would never have outraged medicine in the independent soil that gave him birth. Now, most potent sirs, what has become of contagious cholera; is it not "as free of contagion as a cut finger or an amputated limb?" Well may Professor Lizars triumph over your servility.

Journal de la Société Phrenologique de Paris, t. 1. 1832.

Journal Therapeutique. Mars.

The Glasgow Medical Examiner, Nos. 10, 11, 12, and 13, from January to March inclusive. Edited by J. P. GLEN, Esq. Surgeon.

The Dublin Journal of Medical and Chemical Science for May.

NOTICES TO CORRESPONDENTS.

Simplex.—Though our correspondent has paid six guineas for the licence of the Apothecaries' Society, he must pay the additional four guineas on settling in London. The law authorises this impost. As to the residence of three unqualified apothecaries in his neighbourhood without molestation, that is a common occurrence, which the Hall will attend to if apprised of the facts.

A True-Blue Contagionist.—Many thanks for the caustic poem on the writings of the contagionists; but we must decline its insertion.

Freedom.—This writer has become too saucy and personal. His defence of the

Central Board of Health is mere gratuitous assertion and fudge.

Mr. W.—The matter to which he alludes will be attended to.

Mr. Ingleby's communication will be disposed of as he wishes.

R. B.—A student cannot now enter to a physician's practice at a Dispensary, as the regulations of the Hall require fifteen months attendance from those whose entrance to Lectures commenced after January, 1831; and certificates from Dispensaries will not be received after the 1st of Jan. 1833. This refusal is a gross injustice to Dispensary Physicians, whose instructions are generally much better than those of their hospital rivals; and it is an additional tax upon the student's pocket. But the Hospital Physicians are Fellows, the Dispensary, Licentiates of the College; and as the latter are designated *minus docti* in Collegiate phraseology, and the Apothecaries' Company being the *doctorum doctissimi*, they favour the former, and in return the College will not trouble their Worshipships by inspecting Apothecaries' shops; both acting according to the proverb, *gratia meruit gratiam*.—*Caw me, caw thee*.

A Reformer.—The Institution is a deceptious humbug; no man of sense or character would belong to it.

Dublinensis.—The Irish Board of Health is a legitimate offspring of its respected London sire, and that is sufficient to account for its imbecility.

Mr. S.—The communication is in some parts too severe upon the memory of a surgeon of considerable eminence who is now no more; *nihil de mortuis nisi bonum*. How would our correspondent's son feel on seeing his deceased father styled an ignorant man?

A Pupil of St. George's.—If the Medical Staff feel aggrieved at the exposure of our esteemed correspondent, "A Brick of the Old Hospital," we cannot help it; we inserted the article as independent Journalists, and have paid a like compliment to other London Hospitals. The Physicians and Surgeons of St. George's are as able as their contemporaries; but it is insolent folly to imagine that a residence in London renders the science of Surgery more complete than in the Provinces.

A Pupil of Mr. Green's declines further controversy with us, and writes in a much more gentlemanly tone than in his former letter.

A case of great distress.—A member of the profession, who has contributed largely to medical science, has been reduced to indigence by disease induced by a dissection wound. He has been confined to a bed of sickness for months, and unable to support a young and helpless family. He has parted with his library, with every thing, and is now reduced to such a state that he expects to be arrested for his rent, a few pounds. Need we appeal to the profession in stronger terms? We have given the story of his misfortunes,

THE

London Medical and Surgical Journal.

No. 15.

SATURDAY, MAY 12, 1832.

VOL. I.

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,
During the Session of 1831-32;
BY BARON DUPUYTREN,
PRINCIPAL SURGEON OF THAT HOSPITAL.

Scrofulous, Cancerous, and Venereal Enlargements of the Testicles.—Diagnosis.—Successful Treatment without Operation.—Traumatic Emphysema.—Laceration of the Pleura and Lungs.—Treatment.

INFLAMMATION is common to the testicle or epididymus, and is more readily resolved in the former; the latter organ becomes much more indurated, and is cured with difficulty. The testicle is an organ formed of a soft, pulpy, parenchymatous tissue, in which depositions readily take place and are readily removed. The epididymus, on the contrary, is much more complicated in structure, having a mucous tunic internally, perhaps a muscular membrane, and externally a fibro-cellular tissue; enlargements form slowly, and are removed after a long time. Patients affected with the last disease have the anterior part soft, which leaves no doubt of the sound state of the testicle; but on carrying the hand posteriorly, we feel a hard inequal body, which evidently belongs to the epididymus. Leeches, baths, and cataplasms may generally cure inflammatory enlargements of the testicles; but have no efficacy when the latter is inflamed. By leeching, and other antiphlogistic remedies, M. Dupuytren often removes such affections in eight or ten days; and should they become chronic he employs plaisters of diachylon, and Vigo's plaister with mercury. The bowels are freely opened by saline medicines or by calomel.

The predisposing cause of enlargement of

the testicles is a strumous habit. It is difficult to distinguish scrofulous, venereal, and accidental enlargements, which often progress in a similar manner.

Tubercular degenerescence generally commences in the fibro-cellular tissue that surrounds the epididymus, and finally implicates the testicle itself. These tubercles gradually increase for three or four years; their development, progress, duration, and site will determine their nature. These are less hard than scirrhus, but harder than simple inflammatory enlargements. They are without heat, redness, are heavy, the sub-cutaneous cellular tissue being free. The tumour inequal and irregular; in scirrhus the testicle is globular, the epididymus is rough; the spermatic cord is exempt, but sometimes it is affected. The internal part softens in many points, and there are small projections externally of a blueish colour. These ulcerate, the openings discharge a serous pus and caseous matter, yellow and pultaceous, which is evidently the result of scrofulous disease. *Fistulæ* form and allow a serous pus to escape. This affection may continue for years, and unless combated the testicle becomes soft and fungous, resembling the change which occurs in joints affected with white-swelling. The scrofulous disease of the testicle may terminate in cancer, but this rarely happens. In the latter case extirpation is the only resource.

With respect to the treatment of scrofulous disease, after combating inflammation, it will be found that hygienic measures are more efficacious than remedies. The patient should reside in a healthy, open, situation, wear a flannel dress all over the body, and employ dry frictions. He should take exercise in the open air, especially in fine weather. He should have a nourishing diet with antiscorbutic vegetables. He should avoid acids, acidulous minerals and vegetables, and farinaceous aliments. He should drink a ptisan made of chicory and the tops of the hop. If very delicate, he might have a syrup of gentian with water, while we proscribe those made with wine or ammoniac. After

a certain time he should use iodine and its preparations. He should have the eighth, sixth, fourth, or half a grain of iodine in mint water. This, like all other new medicines, has had its effects greatly exaggerated; it is by no means a panacea, nor is it always efficacious. It may be used externally in the state of hydriodate of potass, either as an ointment or a lotion. Much benefit will also be derived from saline, sulphurous, and aromatic baths. Sulphurous, saline, acid, ioduretted lotions, injected into the fistulæ, are highly beneficial. By the combined use of these remedies, for a long time, we may cure scrofulous enlargement and ulcerations of the testicles. But if all these fail, and the disease terminates in scirrhus, or softening, or suppuration occur, the organ must be amputated. In such cases we must pay particular attention to the general health, lest the patient might die of pleurisy, pneumonia, suppuration of the liver, &c.

On examining the organ, after removal, we can distinguish diseased from the sound parts; there will be a multitude of degenerescences, a blueish-white matter (semifibrous and semicircular) containing coagulated albumen. The tubercles will be surrounded by cysts, or these will be absent. These morbid changes are generally situated in the cellular membrane surrounding the epididymus, or in the latter in the testicle, but seldom in the cord.

In venereal enlargement of the testicle, the antiphlogistic treatment alone will suffice; but we must commit a great error if we suppose a perfect cure will be effected by this plan alone. M. Dupuytren has known a multitude of persons treated in this way who had, after some time, ulcerated genitals, exostoses, and enlargements of the testicles, for the removal of which mercury was indispensable. Three students inoculated themselves with syphilis; they cured themselves by antiphlogistics. After some time one of them laboured under the worst secondary symptoms; he gradually got worse, and died. The other two became affected in like manner, and consulted me, says the Baron—they were cured by antiphlogistics.

What is the diagnosis of venereal testicular enlargements? Every day patients consult us, who can ascribe no cause for their disease. It has been induced by falls, blows, &c. It soon leaves the affected organ and seizes its fellow, and it persists in one or the other. If the tumour is elongated, cylindroid, and having lancinating pain on being touched; and if the patient had venereal affections, such as blennorrhagia, buboes, or chancres, treated by cauterization (caustic), the most fatal of methods; if he declares that the testicle, after having been affected six, twelve, or eighteen months, it returned to its normal state, that then the other became affected, we have the strongest presumption in favour of the venereal nature of the disease; for if the

disease was scirrhus, it would not have disappeared: this is the pathognomonic character of this sort of tumour. Another observation equally important, is, that after the return of the disease, when the cancerous testicle has been removed, the cord becomes affected, which, after the return of the syphilitic enlargement, it is the other testicle that is affected. Besides, if we examine closely, we shall discover other symptoms, such as eruptions, exostoses, &c., which leave no doubt. In a case in which it would be difficult, if not impossible, to determine the real nature of the enlargement, we should use the antivenereal treatment for six weeks or two months before we perform an operation, useless, and often unfortunate in its results.

The existence of the venereal virus has of late been disputed, though we think it is uncontestedly established from what has been already stated, and on account of many other proofs which could be offered. The idea was supported by a mass of subtleties.

In admitting that syphilis is an inflammation, how is it that it has not been remarked that it is communicated in an immense majority of cases? Is not this a characteristic sign that it differs from all other inflammations? Unfortunately for those who hold it an inflammation, they, in removing it by ordinary means, destroy the effect, but leave the cause—a fact well exemplified by the cases of three medical students already mentioned. In fine, we conceive it of immense importance to recollect the two elements of venereal testicular enlargements—the one, simple inflammation, to be treated by antiphlogistic measures; the other, a poison affecting the system, which can only be subdued by mercury.

Traumatic Emphysema—Fractures of the Ribs—Laceration of the Lungs and Pleura.—A waterman, aged 68 years, was admitted into the Hotel-Dieu on the 9th of December. He stated that the cart of a woodman passed over his chest, and caused his present illness. He has cough, great oppression of breathing, a full and frequent pulse. I examined the right side of his chest, says the Baron, with scrupulous attention, but could discover no injury; but in the left præcordial region there existed acute pain, and great sensibility to the touch. There was distinct crepitus, on pressure, and it was even audible. There is considerable tumefaction, but no sign of inflammation, and this is removeable by manual pressure. This is not all: on making pressure there is a distinct crepitation, such as is observed in animals whose cellular membrane has been insufflated.

This is an irresistible symptom of fracture of the ribs, and emphysema, that is to say, an infiltration of atmospheric air into the subcutaneous cellular membrane. The man's life is not in danger at present. The emphysema has not extended to the internal organs,

and experience has demonstrated that when this phenomena is circumscribed to a small extent, the infiltration is confined to a few cubic inches of air, the absorption of which will readily and speedily take place; but is otherwise if the infiltration extends to the cellular membrane of the whole periphery of the organs of the chest and abdomen, when the serous cavities become filled with air. And such a case I shall speedily describe to you, as it is now in the hospital.

In the case under immediate consideration, the fractured extremities wounded the pleura and lungs, and allowed the escape of the air towards the thoracic parietes. I will now explain the mechanism by which this infiltration is formed.

When there are adhesions between the aortal and pulmonary pleuræ, and the rib driven in, as in this case, we can readily comprehend how air may escape through the wound in the lung, and pass into the wound in the thoracic parietes. When there are no such adhesions the air escapes through the wound in the lung into the pleural cavity. It is then agitated by the elevation and depression of the chest during respiration, and, by the effect of its elasticity, it progressively infiltrates into the cellular tissue of all internal and external organs; and, if the quantity of air be considerable, it invades not only the parietes of the abdomen, the superior and inferior extremities, the interior of the scrotum, the neck, and the head, but the pleura, mediastina, pericardium, and to the cellular tissue, which unites the different organic elements of which the lungs are composed.

The patient was bled; compresses, saturated with a resolvent solution, were applied to the side, and a bandage placed round the body. The object of the last was to oblige the man to respire by the aid of the diaphragm alone, so as to favour the union of the fractured ribs as much as possible, and also on account of the emphysema. M. Dupuytren described the physiology of respiration, and concluded that respiration could be carried on by the aid of the diaphragm alone, as exemplified in cases, in which the superior part of the spine had been injured, and all the external muscles of respiration were paralysed.

[The following persons, more or less connected with the medical faculty, died of cholera in Paris, according to the *Journal Therapeutique*, April 30:—

M. Leroux, aged 83, formerly Dean of the Faculty; Mr. Petit, Surgeon to the Hospital at Gros Caillou; M. Dance, one of the Physicians at la Charité; M. Asselin, Physician to the seventh department; M. Baretta, an Italian Physician; Two Students in medicine, at the Hotel-Dieu; M. Bedoiu, Student in Medicine; Three Sisters of Charity; the lad of the library of the Faculty.]

MR. HETLING'S
SURGICAL LECTURES
AT THE
BRISTOL INFIRMARY.

Session 1831-32.

INTRODUCTORY LECTURE.

(Continued from page 428.)

LECTURE THE SECOND.

GENTLEMEN,

THE ceremony of the first Introductory Lecture being over, I shall proceed to make a few more preliminary observations previously to our plunging at once into the particular arrangement of subjects, that it will be my duty hereafter to consider more in detail. I shall, however, on this occasion, without meaning to do so in future, recapitulate briefly the leading points of our last discourse, because I consider it necessary to impress upon your attention, as forcibly as possible, the data upon which we set out on the extensive field of inquiry before us.

In my first lecture on Wednesday last, I stated to you the great extent and vast importance of surgery in reference to suffering humanity and science. I also gave you a short historical sketch of this museum, and its highly-gifted founder, the late Mr. Richard Smith. I adverted to the late regulations of the Royal College of Surgeons, by which this hospital now ranks with the first in the kingdom; and that surgical lectures on our proposed plan were acknowledged by the Council of that body,—advantages of great importance and convenience in a professional and pecuniary point of view, both to the pupils and parents of this city.

I likewise mentioned many other advantages we possess for illustrating the principles and practice of surgery, in reference to books, plates, models, &c., and in particular to this large hospital, which may be truly termed a living museum of disease, worth more than all the morbid preparations that ever were collected; for the information to be derived, even from the best preparations, is of a very limited nature. It is true they demonstrate the exact condition of parts at a certain period of time, but without unfolding the successive steps previously necessary to such condition. I afterwards proceeded to observe upon the high value of dissections and anatomical knowledge; that they were the great study and basis of our profession; that without anatomy the surgeon could not safely move one step, more particularly in operative surgery; and that I trusted a consciousness of this required knowledge would never leave the mind of the student. I also most candidly and strongly gave you my

opinion with respect to the best mode of studying it, namely, under the denomination of what is termed *surgical or relative anatomy*. I pointed out to you the importance of always keeping in mind the great and striking difference you ought to make in your demonstrations on the dead body—between the healthy and diseased state of parts. I illustrated the whole of this subject by observing, that the surgeon's attention is drawn to the same distinctions in his varied operations on the living subject; that in some instances we operate upon sound and healthy parts, as in tying of arteries in aneurism, and in the operation of lithotomy, and in other operations upon confused and diseased parts, as in hernia and other diseases. I closed this department of our subject by recommending an improved mode of medical education, namely, that if anatomy did not precede, it at least ought to accompany your study and practice of surgery, and that in these lectures I should assume that you had already made some elementary progress in your knowledge of anatomy. In quitting this subject, I forcibly urged both upon your notice and that of your parents, not to omit the very great and decided advantages of learning anatomy here. I purposely avoided suggesting to you the best elementary books for the study of anatomy, considering it most proper to leave any advice of that nature to the discretion of your teachers on this subject.

In my observations on physiology, which is now taught as inseparable from anatomy, I guarded you against indulging too much in speculation; or suffering your young minds to be captivated by ingenious, plausible, and seductive theories. I concluded the lecture in mentioning that the proper object of pathology is, the knowledge of the alterations induced by disease in the organs and textures of which the system is composed, by which we arrive at the diagnosis and treatment.

This study is one of the greatest importance, and consequently I urged the necessity of your attending to *post mortem* examinations, as the only means of obtaining true and satisfactory information in this department. I neglected to add, that pathological anatomy has been very slow in its progress in this country, owing to the many obstacles thrown in our way by the varied feelings of sympathy, humanity, and the prejudices of society with regard to the dead. The basis of pathology is founded on morbid and general anatomy. The French have rendered this department the greatest service by following up the views developed by their late distinguished anatomist, BICHAT.

Having finished this summary of our first lecture, I deem it proper to observe that Great Britain and France have been foremost in the cultivation of modern surgery. Candour, however, requires the remark that, in many important points, the most distinguished men that adorn the profession in

each country, differ in their hospital practice. To illustrate this observation (without intending to go at this time into any discussion or controversy on the subject), it will be sufficient to state, that the modern doctrine of adhesion, so ably developed in England, has not been sufficiently estimated in France. An English surgeon, in witnessing an amputation in a French hospital, is offended with the officious zeal with which the French surgeon interposes a handful of lint between the stump and the flap which covers it, with the express design to prevent their adhesion. It is difficult at first to account for these differences between the two methods. They are questions only to be decided by the result of trials on a great scale, and by a rigid comparison of cases. Dupuytren, at the head of the French surgeons, opposing all the English schools on this subject, from the time of John Hunter, who introduced the practise as a general principle of English surgery. I mention these truths thus early to shew you that I mean to be impartial, and also with the view of destroying that erroneous bigotry, which, in spite of ourselves, will creep in, if we confine ourselves to a particular school or nation.

It is now my duty to give you, with a *Definition of Surgery, its Principles and Practice*.

Surgery has risen from the station of a manual art to that of a liberal and enlightened profession, and has now attained the rank which it deserves to hold amongst the highest departments of human knowledge. Surgery has not been, and perhaps cannot be, accurately defined. In the old and common acceptance the word surgery is considered to include the treatment of all injuries; nearly all external disorders, and most of those internal ones which produce changes recognisable externally; and all which require operations, external applications, or indeed any manual interference. But in the more liberal and modern acceptance, surgery is elevated into a science, "which embraces (in the language of Mr. Lawrence) not only the physical history of man, but investigates the human organization under all the various modifications created by surrounding influences, whether natural or accidental, and draws from this source the rules of preserving health and curing disease. The practical application of these rules constitutes the art of healing, or rather of treating disease, (for it will often happen that all our art can only alleviate, the cure being beyond our reach,) while the number of facts and reasonings on which these rules are grounded composes the science of medicine."

There has been a great deal said about the difference between medicine and surgery, but to this day the boundaries between the two are obscure and unsettled.

The union of medicine and surgery remains a controverted point in the profession, and I decline, at least during the present course,

entering upon the niceties of the question. Custom has, however, in hospital practice, and generally in populous cities, separated them into two parts in the higher ranks of the profession.

In this country medicine and surgery are practised together by the great majority of medical men who compose the class usually termed general practitioners; a class whose importance in society is too well known to require me to dwell upon it. It is proper, however, to inform you, that in the medical schools medicine and surgery are taught by separate teachers, and also that there is an established College of Physicians, and a College of Surgeons, to whom students must apply for their diploma, previously to taking their destinations in the profession. In this hospital we find not the least inconvenience or confusion occasioned by keeping these two departments separate; on the contrary, the division of labour affords facilities in practice, conducive to the good management of the whole. On any very extraordinary or interesting case occurring the two branches consult together, and this practice seems satisfactory to both parties; and I believe the same conduct is pursued at most other hospitals in the kingdom. On this tiresome subject you will hear a great deal said by the principal teachers in London. Mr. Abernethy, to whom our profession is so much indebted, states his opinion that surgery and medicine are essentially what the French republic was declared to be, "one and indivisible."

Although the science of physic and surgery cannot properly be separated, yet, in its application to practice, I am not disposed to deny the great and peculiar advantages which society derives from the subdivision of labour in the medical profession. The effects of this subdivision in improving individual skill in the medical, as well as other professions, wherever the state of society is such as to admit of it, is too obvious to be made the subject of any dispute. But the sum of what I wish to contend for, is, that those who are destined for the exercise of the medical profession, by whatever name denominated, whether physician, surgeon, or apothecary, should all receive the same elementary education; as the theory and principles of practice are the same and indivisible, since they truly constitute one and the same science. It is this only which can ensure their mutual co-operation, and enable them to discharge, with full utility to the public, the duties of any particular branch of medical practice to which they may be afterwards induced to devote their exclusive attention. This, it appears to me, is the only rational reform that the present state of medical education admits of, the only proper barrier that can ever be raised between the medical profession and the practice of dangerous quacks and ignorant pretenders.

To convince you, gentlemen, that my mind is not fluctuating on this subject, I mean to

teach you *medical surgery*, because I consider it contrary to nature, and highly detrimental to the progress of science, to separate medicine from surgery. I therefore recommend, most earnestly, your studying medicine generally, if you aspire to success in practice.

Before I dismiss this subject, however, allow me to persuade you not to enter into any angry contentions on this long agitated subject, or those unhappy jealousies which have so long disgraced our profession. Be assured that to the great body of physicians in this country we are indebted for the preservation of our medical literature, and with them remains a storehouse of learning. And mark me, that when you go young into practice, however talented you may be, you will find the protecting influence of their character a firm shield for you against the shafts of prejudice, calumny, and caprice.

(To be continued.)

THE HISTORY OF ANCIENT AND MODERN WINES.

In the year 1824 Dr. Henderson published a large quarto, entitled as above, in which he treated the subject much better than any other British writer. As his classic and laborious work is inaccessible to our junior friends, we have been induced to supply their wants by copying a graphic article on the subject from the last number of a periodical of great merit and utility—*Chambers' Edinburgh Journal*. The able editor of that work has compiled a graphic sketch of the history of ancient and modern wines, which is amusing, instructive, and useful to every class of readers. It contains a full account of the natural history of the grape in all countries in which it has been cultivated. A dietetic and a medicinal agent of such power is well worthy of the attention of the medicinal practitioner. As we usually place before him such a variety of solid aliment, we now offer him an agreeable diluent.

Wine has been lauded from time immemorial by all classes of society; philosophers, theologians, poets, historians, and physicians, have sung its praises. A history of its moral, physical, and medical effects would fill a goodly folio. Without pretending

to attempt its praises, we may cite a few opinions of its value. It excites us to the performance of the most virtuous and wicked actions—" *vina parant animos faciuntque caloribus actos.*" It exhilarates the mind, removes depressing passions, and banishes dull care—" *cura fugit, multo diluiturque mero.*" It elicits truths—" *in vino veritas.*" It renovates the old, as we are informed by the poet—" *narratur et prisca Catonis, sæpe mero caluisse virtus.*" It is a panacea for our moral and physical evils, according to the following lines—

*" Vinum facit vetulas leviter salire,
Pauperes facit divites ; claudos facit ire,
Mutos facit loquere, surdos et audire."*

It possesses other properties explained in these words—" *sæpe sine Baccho friget Venus.*" Granting the juice of the grape all these good qualities, we cannot venture to trespass farther in its eulogy on the patience of our sober and serious readers, whose kind indulgence we expect, as we seldom deviate from the grave truths of science. They will, no doubt, agree with us in assenting to the opinion of the ancient poet—" *Omne tulit punctum qui miscuit utile dulci.*"

When taken in moderation the effect is salutary; when taken repeatedly in excess a permanent irritation is produced. Those who abuse it, are nervous, irritable, hypochondriac, melancholic, and often become maniacal; and frequently die of inflammation of the abdominal viscera or of dropsy.

As a therapeutical agent, it is lauded as a panacea by the rich and the poor, the monarch and the peasant. It is employed during the convalescence of typhus and continued fevers; of plague, yellow fever, and the *blue cholera*; in all cases of debility, unaccompanied by inflammation, as after severe hæmorrhages, in scurvy, scrofula, &c. It is contra-indicated in all continued fevers during excitement of the circulation; in all acute inflammations; and in diseases of the heart and large blood vessels. It is inju-

rious to all those who are liable to determination of blood to the brain, lungs, or any other organ in the body. When taken in moderation wine is useful to all persons in health, more especially to those whose occupations require much mental or corporeal exertion.

Red are more injurious than white wines, to those of a sanguineous temperament; while the reverse occurs to the nervous. The light Champagne wines are most suited to those whose stomachs are sensible and easily irritated. The best tonic wines are those of Madeira and Bordeaux. Burgundy, when diluted with water, is the most powerful, agreeable, and excitant tonic.

In general wine is most improper for infants and children, as it excites the circulation, which is already rapid with them, and consequently causes diseases. The young of the lower animals do well without this beverage. In order to complete these observations we shall give the relative proportions of alcohol in the wines which are most in use, according to Henderson, Prout, Brande, and Ziz. We shall omit the fractional parts.

Tokay contains 9 per cent. of alcohol; Claret, Red Hermitage, and Côte Rôtie, 12; the Rhenish wines from 6 to 13 per cent., and from 6 to 12 of acid, equal in strength to concrete tartaric acid; Champagne, 12 per cent.; Burgundy, Constantia, and Sauterne, 14; Lissa, 15; Malmsy, Madeira, 16; Malaga, Marsala, Buccellas and Lisbon, 18; Teneriffe, 19; Madeira and Port, 22; Sherry, nearly 24; and the Etna or Lyracuse wines, 30.

Having premised these remarks, we now hasten to extract the article from the periodical of Mr. Chamber's, and place before our readers a mass of information well worthy of their attentive perusal. The following comprehensive and classic history of ancient and modern wines reflects great credit upon the research and taste of the compiler.

WINES.

"Omnia vastatis ergo quum cerneret arvis
Desolata Deus; nobis felicia vini
Dona dedit; tristes hominum quo munere fovit
Reliquias, mundi solatus vite ruinam!"

Vanierii Præd. Rusticum. lib. xi.

"Drink no longer water, but use a little wine for thy stomach's sake, and thine often infirmities."---*St. Paul's First Ep. Tim. v. 22.*

"No species of beverage has obtained so respectable an antiquity, and been of so much universal appreciation among mankind, as WINE. The use of this liquor can indeed be traced up to the earliest ages of the world. We find, from the sacred writings, that Noah planted a vineyard shortly after the deluge; and a modern Latin poet, exalting the origin of wine in the above quatrain, ingeniously represents the vine as a gift from Heaven, to console mankind for the miseries entailed upon them by that grand catastrophe. I hope my readers will allow me to present them with a brief account of the most celebrated ancient and modern wines, gleaned for their amusement from the best authorities on the subject.

"This generous liquor, as is well known, is an expression of the grape, the fruit of the vine, a shrub indigeneous to Persia and the Levant, but now found in most temperate regions. From Asia the vine was introduced into Greece, and thence into Italy. The Phœceans, who founded Marseilles, carried the vine into France, in which country and in Portugal it is at present in the most extensive cultivation. There are a great variety of vines; and this circumstance, combined with difference of soil, climate, mode of preparation, &c., has occasioned an extreme variety in the different species of wine. But even between places immediately contiguous to each other, and where a cursory observer would hardly remark any difference, the qualities of the wines, though produced by the same species of grape, and treated in the same way, are often very different. A great deal evidently depends on the aspect of the vineyard; and it is probable that a good deal depends on the peculiarities of soil; while not a little also depends on the management of the vintage. Thus, for a brisk wine, the grapes are gathered before they are perfectly ripe; for a dry, as soon as they have acquired their proper maturity; and if a sweet wine be desired, the gathering is postponed to the latest period. Dry and clear weather is generally chosen for the vintage; but the best brisk Champagne is made from the grapes that are collected during a fog, or before the dew that has settled on the vines is dispersed. The roughness of [wine depends, in some degree, on the circumstance of the stalks of the grapes being added or excluded. In the preparation of Port, I believe, they are always used, but in the manufacture of the more delicate red wines of Bourdeaux, they are generally excluded. With regard to colour, this is derived from the skin of the grape; for the juice of red or black grapes, with the

exception of the *Tantilla* grape, the pulp of which is coloured, yields as colourless a wine as that procured from white grapes, when it is fermented without the hulls.

"The earliest of the Greek wines was the Maronean, a sweet black wine, which Homer describes as 'rich, unadulterated, and fit for the gods,' and as so potent, that it was usually mixed with twenty measures of water. Nearly of equal antiquity was the Pramnian, a strong, hard, astringent, red wine, from the island of Icarus. It resembled our Port wine, like which also it was often used medicinally, and on that account was sometimes called *pharmacites*. The best Greek wines, however, and those in which they surpassed all other nations, were the luscious sweet wines, the products of the Ionian and Ægean seas, particularly Lesbos, Chios, and Thasos. They were wines of a pale amber colour, with much odour and a high flavour. The Phanean, which is extolled by Virgil as the king of wines, was from Chios. The lighter wines were the Mendean, the Argitis, and the Omphacites; but the Greeks were also acquainted with the African and Asiatic wines, several of which were in high reputation. The Bythnian wines were of the choicest quality; the wines of Byblos, in Phœnicia, on the other hand, vied in fragrance with the Lesbian; and, if confidence is to be placed in the report of Athenæus, the white wines of Mareotis and Tœnia, in Lower Egypt, were of almost unrivalled excellence. The former, which was sometimes called the Alexandrian, from the neighbouring territory, was a light, sweetish, white wine, with a delicate perfume, of easy digestion, and not apt to affect the head; though the allusion of Horace, to its influence on the mind of Cleopatra, would seem to imply that it had not always preserved its innocuous quality. The wine of Merôë, however, which was produced at the feast given to Cæsar by that voluptuous female, would appear to have been in still higher estimation.

"The wines of ancient Italy were more celebrated than those of Greece. The choicest of the Roman wines were the Massic and Falernian, besides which, there were many wines of an inferior quality, but in all of which the Roman citizens in the upper ranks indulged with great freedom at their expensive public and private feasts. No wine has ever acquired such extensive celebrity as the Falernian, or more truly merited the name of 'immortal,' which classic writers have conferred upon it. All writers agree in describing the Falernian wine as very strong and durable, and so rough in its recent state, that it could not be drunk with pleasure, but required to be kept a great number of years before it was sufficiently mellow. Horace terms it a 'fiery' wine, and calls for water from the spring to moderate its strength. From Galen's account, it appears to have been in best condition from the tenth to the twentieth year; and afterwards it was apt to contract au

unpleasant bitterness, especially if not preserved in glass bottles. Horace, who was a lover of old wine proposes, in a well known ode, to broach an amphora, or jar, which was coeval with himself, and which, therefore, was probably not less than thirty-six years old. It will be remembered, by some of my readers, that on one occasion Cicero having supped with Damasippus, he had some indifferent wine presented to him, which he was pressed to drink, as being Falernian, forty years old; and that, on tasting it, he pleasantly observed, that it bore its age uncommonly well! It is the opinion of Dr. Henderson, who has written a history of wines, that Xeres and Madeira wine may be fixed upon as the two to which the Falernian offers the most distinct features of resemblance. Both are straw-coloured wines, assuming a deeper tint from age, or from particular circumstances in the quality or management of the vintage. Both of them present the several varieties of dry, sweet, and light. Both of them are exceedingly strong and durable wines; being, when new, very rough, harsh, and fiery, and requiring to be kept about the same length of time as the Falernian before they attain a due degree of mellowness. This celebrated Roman wine was the produce of the Campagna Felice, which possesses a soil analogous to that of the island of Madeira. In preparing their wines, the ancients often inspissated them till they became of the consistence of honey, or even thicker. These were diluted with water previously to their being drunk; and indeed the habit of mixing wine with water seems to have prevailed much more in antiquity than in modern times.

"The best wines of France are those produced in Champagne, Burgundy, Dauphiny, and the Bordelais; Languedoc and Rousillon also produce wines in considerable quantities, but they are reckoned inferior. The wines of Champagne are commonly divided, following a distinction occurring as early as the ninth century, into River wines—*Vins de la Riviere de Marne*, which are for the most part white; and Mountain wines—*Vins de la Montagne de Reims*, which are red. The former are mostly brisk or sparkling wines, and distinguished by their delicate flavour and aroma. But the briskest wines are not always the best; and unless they are very strong, much of the alcohol is carried off with the carbonic acid gas, which occasions the froth. Hence the slightly frothing wines—*cremans* or *demi-mousseux*, are preferred by persons of *haut gout*. Sillery, which has obtained its name from the vineyards which yield it, holds the first rank among the white wines of Champagne. It was brought into vogue by the peculiar care bestowed on the manufacture of it by the *Maréchale d'Estrees*, and was long known by the name of *Vin de la Maréchale*; and has always been much in request in England. The most celebrated of the River wines, strictly so called, is that of Ay. Of the Reims moun-

tain wines, those of Verzy, Verzenay, Mailly, Bouzy, and St. Basle, are most esteemed. But the Clos St. Thierry furnishes the only red wine that can be said to unite the rich colour and aroma of Burgundy with the delicate lightness of Champagne.

"The choicest of the Burgundy wines—for which the Dukes of Burgundy deservedly merit their ancient designation of "*princes des bons vins*"—is that of Romanée-Conti, a wine scarcely known in England, and produced in small quantities only; the vineyard being not more than six and a half English acres in extent. Chambertin, another Burgundy wine, almost rivals Romanée-Conti. It was the favourite wine of Louis XIV., and of Napoleon. It is the produce of a vineyard of that name, situated seven miles to the south of Dijon, and furnishing each year from 130 to 150 puncheons, from an extent of about 65 acres. Chambertin wine is of a full body and colour. The next was that of the Clos-Vougeot, when that small domain was the property of the church; but it is now considered as the third or fourth growth, and is surpassed by those of Romanée de St. Vivant, Musigny, Clos de Premeau, and some others. Under the name Maçon, which is the red Burgundy best known in England, are comprehended not only the growths of the Maçonais, but also the chief wines of the Beaupolais, forming part of the department of the Rhone. These wines are all red; but the white wines of Burgundy, although less known than the red, maintain the highest rank among the French white wines. The best is the Mont Racher wine, famous for its high perfume and agreeable nutty flavour; but there are three varieties of it, *ainé, chevalier*, and *batard Mont Racher*, the last of which sells, or used to sell, for only one third of the price of the first.

"The wines of Dauphiny are among the most ancient in France; but the celebrity of some of them, the Condrieux, the Hermitage, and the Côte Rôtie, is of very ancient date. The Hermitage, which derives its name from the ruins of a hermitage on the rock on which the vineyard is situated is both red and white; the former being the production of the *siros*, and the latter that of the *marsanne* and *roussanne* grapes. The Côte Rôtie resembles the Hermitage in flavour and perfume; and the department of Vaucluse furnishes a few growth analogous to both, but inferior in quality. Dauphiny yields also a luscious wine, resembling the best Constantia. It is made from the richest grapes, which are hung up or spread upon straw for six or eight weeks, or until they become half-dried, from which circumstance the liquor obtained from them is named "*Straw Wine*," or *Vin de Paille*.

"The wines of Languedoc, Provence, and Rousillon, are superior only in the class of sweet wines. The wines of Tavel, Chuzclan, St. Geniez, Lirac, and St. Laurence, are the best of the red wines of Languedoc. They have a bright rose tint. The red wines of

Rousillon are the strongest and most durable that France produces; the choicest are those of Bagnols, Cosperou, and Collioure. The wines of Provence are of very ordinary quality. Among the dry white wines of these districts are the Rivesaltes and the Frontignac. The wines of Gascony and Guienne are better known by name in England than any other of those of the French vineyards; the names Lafitte, Grave, Châteauneuf, Margaux, Sauterne, and Barsac, being familiar to most ears on this side of the channel; yet these wines are understood to be seldom seen on the table in this country, owing to the various processes to which they are subjected by the merchants of Bordeaux, in adapting them for the English market. Thus we drink an artificial wine called *Claret*, which is made up by adding to each hogshead of Bordeaux wine three or four gallons of Alicante, or Benicarlo, half a gallon of Stum wine, and sometimes a small quantity of *Hermitage*. This mixture undergoes a slight fermentation; and when the whole is sufficiently fretted in, it is exported under the name of *Claret*.

“The wines of Spain are distinguished by high flavour, aroma, strength, and durability; but from the mismanagement of the fermentation, the red wines in particular are dull and heavy on the palate; and, except in dry white wines, none of the Spanish wines will bear comparison with the more delicate growths of France. The most perfect are the produce of Xeres, from which our *Sherry* takes its name. The Spanish wines, when not exported, are stored in skins smeared with pitch, which gives them a peculiar and disagreeable taste, called the *oler de bota*, and renders them more liable to become muddy. The principal vineyards at Xeres are in the hands of British and French settlers; and to these the great improvement, of late years, in the manufacture of *Sherry* is attributed. In making this wine, red and white grapes are used indiscriminately, and dried to a certain extent before they are pressed. The fermentation is allowed to be continued from October till the middle of December, before it is racked from the lees; and that intended for exportation receives a certain proportion of brandy, which seldom exceeds three or four gallons to the butt. The nutty flavour, so highly prized in this country, is produced by infusing bitter almonds in the wine. Good *Sherry* is of a deep amber colour, and has a fine aromatic odour; its taste is warm, with some degree of agreeable bitterness. When new, it tastes harsh and fiery; it is mellowed by being allowed to remain four or five years or longer in the wood; but it does not attain to its full flavour and perfection until it is kept fifteen or twenty years. It is a very strong wine, containing about 19 per cent. of alcohol. Perhaps no wine is so much adulterated as *Sherry*. Its consumption is very large, amounting to above 2,000,000 of imperial gallons.

“In Portugal, the principal wine district

is the province of Upper Douro, in which Port wine is grown to a great extent, and shipped at Oporto, whence its name. Besides the Douro, other districts in Portugal supply wine. The growths of Alenquer, Torres Vedras, Lamego, and Moncao, furnish wines resembling the second growths of the Bordelais. The Colares Port, which is grown near Cintra, is the only one which has found its way to this country. Bucellas, Setuval, and Carcavellos, are the best of the Portuguese white wines. To return to Port. When this respectable and substantial liquor arrives in this country, it is of a dark purple or inky colour, has a full rough body, with an astringent bitter sweet taste, and a strong flavour or odour of brandy. After it has remained some years longer in the wood, the sweetness, roughness, and astringency of the flavour, abate; but it is only after it has been kept ten or twelve years in bottle, that the odour of the brandy is completely subdued, and the genuine aroma of the wine developed. When kept too great an age it becomes tawny, and loses its peculiar flavour. During the process of melioration, a considerable portion of the extractive and colouring matter is precipitated on the sides of the vessels in the form of crust. In some wines this change occurs much earlier than in others. A large quantity of brandy is always mixed with the wine shipped from Oporto to England. Genuine unmixed Port wine is very rarely met with in this country. We have been so long accustomed to the compounded article, that were it possible to procure it unmixed it is doubtful whether it would be at all suited to our taste. According to Mr. Brande's analysis, Port wine, as used in England, contains about 23 per cent. of alcohol; consequently, nearly the fourth part of every glassful is pure spirit. It should, however, be observed, that this proportion of spirit is not injurious, as the other matter in the wine neutralizes its effects. In purchasing good Port, as in other liquors, a very great deal depends on the respectability of character of the merchant. The quality is understood to be injured previous to its shipment, in consequence of a monopoly long enjoyed by an association, called the Oporto Wine Company, under the auspices of the Portuguese government. The quantity of Port shipped annually from Oporto to Britain amounts to above 20,000 pipes, or above 2,300,000 imperial gallons, being about the same quantity that is used of *Sherry*.

“The wines of Italy and Greece are but little imported into England. They are, without a single exception, in all respects very inferior to those of France. The natives of Italy bestow no care upon the culture of the vine: and their ignorance, obstinacy, and want of skill in the preparation of wine, are said to be almost incredible. In some districts the art is, no doubt, better understood than in others, but had the Falernian, Cecuban, and other famous ancient wines, not been in-

comparably better than the best of those that are now produced, they never would have elicited the glowing panegyrics of Horace.

“Madeira wines, the produce of the island of that name, have long been in extensive use in this country. There is a considerable difference in the flavour and other qualities of the wines of Madeira. The best are produced on the south side of the island. Though naturally strong, they receive an addition of brandy when racked from the vessels in which they have been fermented, and another portion is thrown in previously to their exportation. This is said to be required to sustain the wine in high temperature, to which it is subjected in its passage to and from India and China, to which large quantities of it are sent; it being found that it is mellowed, and its flavour materially improved, by the voyage. Madeira wines may be kept for a very long period. Indeed, they cannot be pronounced in condition until they have been kept ten years in the wood, and afterwards allowed to mellow nearly twice that time in bottle; and even then they will hardly have reached the utmost perfection of which they are susceptible. The Madeira wines unite great strength and richness of flavour with an exceedingly fragrant and diffusible aroma; they have latterly fallen into disrepute in England. The growth of the island is very limited, not exceeding 20,000 pipes, of which a considerable quantity goes to the West Indies and America. Hence, every sort of deception was practised with respect to it, and large quantities of spurious trash were disposed of for the genuine vintage of the island. This naturally brought the wine into discredit; so that Sherry has for several years been the fashionable white wine. Malmsey, a very rich luscious species of the Madeira, is made from grapes grown on the rocky grounds exposed to the full influence of the sun's rays, and allowed to remain in the vine till they are over ripe.

“Teneriffe wine, the produce of the island of Teneriffe, is used to a moderate extent in England. It resembles Madeira, and is not unfrequently substituted in its place; but it wants the full body and rich flavour of the best growths of Madeira.

“The wines of Germany imported into England are principally produced on the banks of the Rhine and the Moselle. The Rhine wines constitute a distinct order of themselves. They are drier than the French white wines, and are characterised by a delicate flavour and aroma, quite peculiar, and which would be reckoned *sourness* by the uninitiated. The vineyards of Johannisberg, Steinberg, and Grafenberg, yield the choicest vintages on the banks of the Rhine. The Hock, or Hochemier, is a Mayn wine. In the Austrian states the wines are almost all of an inferior quality, being sharp and often entirely acid. Tokay is a Hungarian wine, and is merely the juice which exudes from the half-dried grapes by the pressure of their own weight. It is luscious, and at the same

time possessing a high degree of flavour and aroma.

“Of the remaining wines imported into England, those of the Cape of Good Hope form the largest proportion; the quantity annually entered for home consumption being about 540,000 imperial gallons. The famous Constantia wine is the produce of two contiguous farms of that name, at the base of the Table Mountain, between eight and nine miles from Cape Town. Cape wines are all inferior in quality to those produced in Europe; some are indeed execrable, but being admitted at half the duty of other wines, they are largely imported as a menstruum for adulterating and degrading Sherry, to which they bear a resemblance. In cookery, Cape wines, from their cheapness, are also sometimes used instead of Sherry.

“The total amount of wines of every description used annually in the United Kingdom, is about 7,000,000 of imperial gallons, from which the government derives a duty of about 1,500,000*l*.

“In former times the chief and most fashionable wines drunk in ‘Merry England’ seems to have been Canary, a ‘stoup’ of which cheering liquor mingles in all our descriptions of the ‘olden time.’ Canary wine, the produce of the Canary Islands, is now little heard of, being almost as obsolete as sack. With regard to the last mentioned wine, which has been immortalised by Shakspeare, little is satisfactorily known. It has been ascertained that the wines called Sacks were imported from Spain, and that the name is derived from *sec*, signifying dry. We are informed by Venner, that ‘Sacke is completely hot in the third degree, and of thin parts, and therefore it doth vehemently and quickly heat the body.’ This description accords with the epithet ‘sprightly,’ usually bestowed on it by the old writers, some of whom extol it as ‘the elixir of wines.’ Falstaff complained that there was lime in his Sack, which has been thought to allude merely to the adulteration of Sack by the vintners; but, in fact, it throws much light on its genuine qualities, and proves it to be of the same nature as the wines still manufactured in Spain and other countries, from the ripest grapes, which receive a sprinkling of gypsum, or burnt lime, before they are pressed and introduced into the vat. Of Sacks there were different species, as Canary-sack, Palm-sack, and Malaga-sack, &c. Sacks of all kinds are now among the liquors which have been; and, alas, ‘we ne’er shall look upon their like again.

[When we consider the incessant appeals made to medical practitioners as to the preference given to wines in health and disease, we cannot help thinking that in inserting the above we have done our junior friends a service.—EDS.]

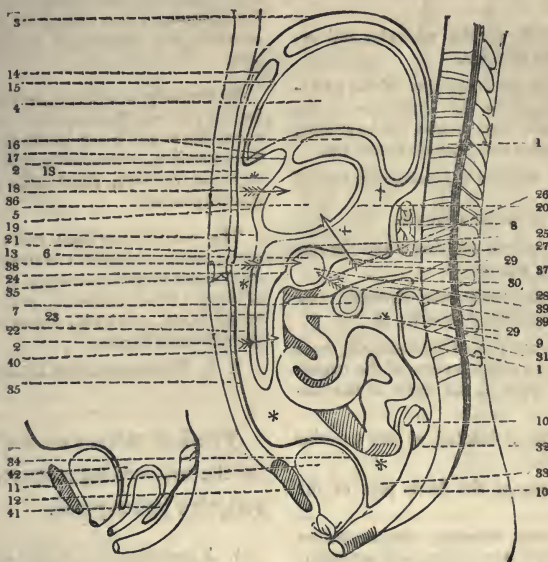
The Dissector's Manual; or Student's Companion. By EDWARD WILLIAM TUSON, F.L.S.

(Continued from page 439.)

WE resume our extracts from this well-executed production with great

pleasure, as we conceive that by extracts alone shall we be able to prove its great utility to students, it being completely incapable of analysis.

The diagram shows a section of the body, and the peritoneum may be traced from any point round the viscera, back again to the same point.



1. 1. A section of the spinal column.
2. 2. A section of the parietes of the abdomen.
3. 3. A section of the diaphragm.
4. 4. The section of the liver.
5. 5. Section of the stomach.
6. 6. Section of the colon.
7. 7. Section of the intestines.
8. 8. Section of the pancreas.
9. 9. Section of the kidney.
10. 10. The rectum.
11. 11. Section of the bladder.
12. 12. Section of the pubis.
13. 13. The peritoneum, lining the upper part of the parietes of the abdomen traced from the umbilicus,
14. 14. Passing upon the under or concave part of the diaphragm, from thence to
15. 15. The convex surface of the liver, (forming the suspensory, the two lateral, and coronary ligaments, which are not shown); from the convex surface of the liver, it passes to
16. 16. The concave surface; from thence it descends, forming
17. 17. The lesser omentum, or hypogastricum of Winslow, which consists of two layers, which pass to

18. The lesser curvature of the stomach. Here the two layers divide;

19. The one layer passing on the anterior part of the stomach;

20. The other layer on the posterior part of the stomach; so that the two layers embrace that viscus, meeting at

21. The greater curvature, when the two layers again unite; and at

22. They descend to form the anterior part of the omentum magnum. At

23. The two layers are reflected upon themselves, completing the formation of the omentum magnum.

24. The two layers meet the transverse arch of the colon, where they again divide: one layer at

25. Passing above, or anterior to the colon, and the other at

26. Behind, or below the colon; the two layers again meet at

27. To form the mesocolon, connecting the colon to the spine, when one layer passes up to cover the anterior part of the pancreas and spleen, the other layer passes at

28. To form the anterior part of the mesentery, which passes at

29. Over the intestines, then is reflected at

30. To form the posterior part of the mesentery, the mesentery serving to contain the vessels and support the intestines. The peritoneum then, at

31. Is reflected over the kidney, then descends at

32. Forming the mesorectum, connecting that intestine to the sacrum, at

33. Forms a cul de sac between the rectum and bladder, at

34. Is reflected over the posterior and superior part of the bladder.

35. Ascends at the inner part of the parietes of the abdomen to the umbilicus, to the point where it was first begun to be traced, forming an anterior and posterior shut sac.

* * *. The anterior shut sac, the seat of ascites.

† † †. The posterior shut sac.

This diagram points out, that when the abdomen is opened, that at

36. The anterior part of the stomach, one layer of the peritoneum covers it; at

37. The posterior part of the stomach, three layers are situated; two layers of the mesocolon, and one layer at the back of the stomach.

38. Three layers, situated at the anterior part of the colon.

39. One layer, at the back part of the colon.

40. Four layers, forming the omentum magnum; which is divided into the omentum colicum, that part situated on the right side of the abdomen attached alone to the colon, and into the omentum gastro-colicum, that part attached to the stomach, and colon.

In the female, two cul de sacs are formed, one at

41. Between the rectum and uterus, and one at

42. Between the uterus and bladder.

The peritoneum, named from its being stretched or spread around the intestines, is a firm but simple membrane, by which the abdominal viscera are surrounded, and partly supported. Its external surface is rough and cellular, and closely connected with the parts to which it belongs. The internal surface is remarkably smooth, and lubricated by a liquor which is exhaled from its own vessels. It is very elastic, and admits of great extension, as happens in gestation, corpulency, ascites, and hernia; but, upon the causes of extension being removed, it returns to its former dimensions. It lines the diaphragm, and passes downwards, adhering firmly to the abdominal muscles. It also lines and covers the contained parts of the pelvis, from which it is

reflected in the back part of the abdomen, lining the muscles there, and, by its reduplications, covers the intestines and great blood-vessels of that cavity. However, the abdominal viscera may be said to lie on the outside of the peritoneum. In its passage from one intestine to another, it forms doublings, which serve as ligaments to fix them to each other, and likewise to the body. It forms a large sac, the posterior part of which adheres firmly to the different viscera, and the anterior to the abdominal muscles; the part lining the abdomen being merely in contact with its contents, and allowing a small degree of motion.

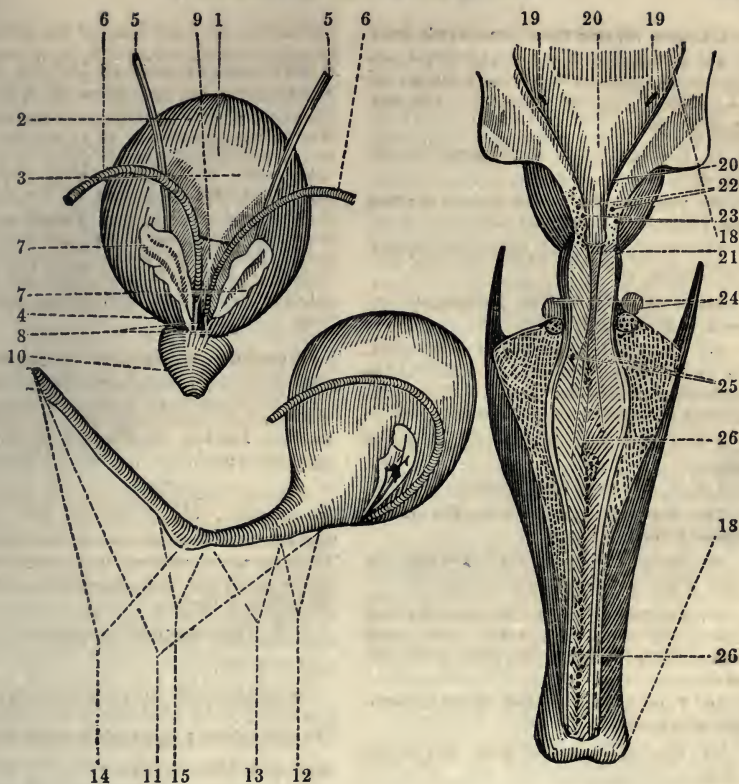
The cellular substance, on the external surface of this membrane, is not every where of equal thickness, being in some parts, as upon the intestines, remarkably thin; in others, as over the kidneys, filled with a considerable quantity of fat.

The peritoneum lines and strengthens the cavity of the abdomen; incloses and assists in supporting its different viscera, furnishes most of them with an external coat, connects them to the body, and by its smoothness prevents the effects of friction.

7. 8. The stomach and intestines.

The last extract we shall make, will be the urinary apparatus with the descriptive letter-press.

1. A posterior view of the bladder.
2. The fundus.
3. The body.
4. The cervix.
5. The ureters, descending to terminate at the posterior, inferior, and lateral parts of the bladder.
6. The vasa deferentia, terminating in
7. The vesiculæ seminales.
8. The common union of each vas deferens and vesiculæ seminales.
9. The situation of puncturing the bladder, where it is connected to the rectum by cellular substance.
10. The prostate gland.
11. The urethra; its average length being about nine inches; dividing into
12. The prostatic portion.
13. The membranous portion.
14. The portion situated in the corpus spongiosum.
15. The bulb.
16. The orifice.



- 17. The fossa navicularis.
- 18. The bladder and penis opened.
- 19. The termination of the ureters.
- 20. The trigon.
- 21. The caput gallinaginis.
- 22. The opening of the common union of the vesiculæ seminales and vas deferens into the prostatic portion of the urethra.
- 23. The opening of the ducts of the prostate gland.
- 24. Cowper's glands.
- 25. The opening of Cowper's ducts into the urethra.
- 26. The openings of the lacunæ.

The average length of the urethra is about nine inches, the prostate portion occupying about three quarters of an inch, the membranous portion about an inch and a quarter, and the portion contained in the corpus spongiosum about seven inches. There are usually three dilatations of the urethra—one at the prostatic portion, one at the bulb, and one behind the orifice termed fossa navicularis; and there are generally three contractions—one at the orifice, which is about the fifth of an inch in diameter; one at the membranous portion, about a quarter of an inch; and one anterior to the bladder, at its orifice. The openings of the urethra are numerous lacunæ, which are formed by the mucous membrane

of the urethra, constituting small sacs or folds, for the purpose of secreting mucus, to prevent the acrimony of the urine from irritating this membrane. They are more numerous at that part of the urethra which is situated towards the corpora cavernosa, by which means the mucus is enabled to flow all over the lining membrane of the urethra. These folds, or lacunæ, are estimated at about seventy in number, of which there are two or three larger than the others, just beneath the glands penis.

Cowper's glands are two small bodies, situated at the membranous portion of the urethra. Their ducts are about three quarters of an inch in length, and enter just at the anterior part of the membranous portion of the urethra, by perforating it obliquely.

The opening of the common union of each vas deferens with each vesicula seminalis forms a smaller duct or orifice than either the vas deferens or the vesicula had before the union. The common ducts descend at the back part of the neck of the bladder with the prostate glands, to terminate at the eye of the caput gallinaginis, and the orifice is surrounded by six or seven openings from the prostate gland.

The penis is composed of three bodies, two of which constitute the dorsum, or upper

part, termed corpora cavernosa, which arise from the inner part of the tuber ischii, by an attachment termed crus penis, or the crus of the corpus cavernosum. The crura (the one on each side) pass forward and inwards, unite together, and terminate on the corona glandis. Between the two corpora cavernosa there is a perpendicular septum, termed septum pectineforme, which divides the two bodies from each other; but, however, there is a communication between the two, through the medium of fissures, which are more numerous at the upper part than at the lower portion. By these fissures, the blood is allowed to flow from one of these bodies to the other. From the upper part of these two bodies, anterior to the pubis, a process of a triangular shape is sent off, which consists of a fibrous structure, and connects the penis to the pubis, termed the ligamentum suspensorium; between the two corpora cavernosa there is a groove at their upper part, and in this groove the vena magna penis is situated, having an artery on either side, the arteria dorsalis penis.

The corpus spongiosum urethra is situated immediately beneath the two former bodies, commencing from the bulb of the urethra, and advancing forwards to terminate by forming the glans penis, which covers and incloses the ends of the corpora cavernosa, but separated from them by a continuation of the same membranous sheath which inclosed those two bodies. The corpus spongiosum is covered by a sheath similar to that investing the corpus cavernosum, but it is of a more delicate texture. The internal structure of the corpus spongiosum is nearly similar to the corpus cavernosum, but some anatomists consider it as merely a plexus of veins. About the cervix of the corona glandis there are many follicles, termed glandulæ odorifere, which discharge a sebaceous matter to preserve the sensibility of the glands, and allow the prepuce to move backwards and forwards with facility. The skin covering the penis is of a thin texture, and is united to the parts beneath by loose cellular tissue, containing no fat. At the front of the penis the skin forms a loose fold, named prepuce, which is generally of sufficient length to cover the glands. In its relaxed state, the inner layer of the prepuce is attached to the under part of the glands by a triangular fold, termed the frænum.

Ere we close this notice of Mr. Tuson's work, we cannot help expressing our gratification at the ability with which it is executed. The wood-cuts are all good, many of them excellent; the description accurate; and it is altogether a work which we feel much pleasure in recommending to medical students.

A Practical Treatise on Uterine Hæmorrhage in connexion with Pregnancy and Parturition. BY JOHN T. INGLEBY, M.R.C.S.L., one of the Surgeons to the General Dispensary, Surgeon to the Magdalen Asylum, and Lecturer on Midwifery at the School of Medicine in Birmingham. 8vo. pp.276. One Plate, London, 1832. Longman and Co.

THE author of this work is evidently a Surgeon of much experience, considerable research, and sober judgment. In the work before us, he describes a vast number of diseases of pregnant, parturient, and puerperal women, all more or less connected with uterine hæmorrhage. Though we agree with him on most subjects, there are several important exceptions; but upon the whole his opinions are entitled to consideration and respect.

In his preface he properly deplors the neglect of obstetrics as a branch of medical and surgical education. He points out the great mortality caused by midwives and uneducated obstetricians; he appeals to the examiners at the Royal College of Surgeons and Apothecaries' Hall, as to the necessity of examining candidates in obstetrics; and informs them that lecturers on this branch of science are generally unattended; their certificates, which are a matter of form, being all that is desired, "for so long as the pupil knows that his obstetrical qualifications will not be scrutinized, he will be indifferent to this department of study. The examinations systematically pursued by many obstetrical teachers of those few pupils who avail themselves of the privilege, constitute at present the only public security, inefficient as it is against incompetence in practice." This statement is literally true, and proves the defective state of medicine in this country; and the barbarous inhumanity of those legal heads of the profession, who continue insensible

to the claims of society and of science. When we consider the rigid examinations in obstetrics in Dublin, Paris, Vienna, in a word in Europe and America, we blush for the apathy and the insensibility of the faculties in London and Edinburgh. Notwithstanding this gross and culpable neglect of testing the acquirements of students, there are few of those who are advanced in their studies, who do not sedulously attend lectures on obstetrics, as we can attest from a good deal of personal experience. There are few subjects more interesting than the obstetrics, and none so essential to success in practice. We fully agree with our author, that some legislative enactment should be passed for regulating the practice of midwifery in this kingdom, because it is a stigma upon this age and country, to allow the incalculable destruction of human life, which takes place by the ignorance of male and female obstetricians. The laws of this country are, in some matters, the most absurd that exist; they punish a man with death for robbery of a shilling, and they allow others to cause the deaths of thousands annually with perfect impunity. In France neither male nor female is suffered to practice obstetrics, without a proper education, and a rigid examination of their knowledge; while in England any illiterate, vulgar wretch, may place the words surgeon and accoucher over his dwelling, and slay his fellow-creatures to any extent he pleases. Is it not notorious, that thousands in these kingdoms usurp the above titles, without any medical, and often without the first rudiments of an English education; and yet, such a state of things is allowed by our worthless corporations of physicians, surgeons, and apothecaries, whose chief object is speculation and tyranny. The lethargy which these medical corporations throw over the whole profession has extended to the public, and exercises its baneful influence to the fullest extent, even at the present period, and proves reform absolutely expedient.

The first chapter of the work before us, is on the moral and professional duties of obstetricians, and abounds with valuable precepts to the student and young practitioner. If there be any fault in these observations, it is the frightful, if not exaggerated picture which is given of the mortality of women who die in childbed. We are unacquainted with the facts which authorise the following assertion—"on the continent the alleged mortality is frightful." We think, on the contrary, that if any thing, the mortality is less on the continent than in this country, or at all events about the same. Neither can we agree with Mr. Robertson's assertion quoted by our author, "more women die of hæmorrhages succeeding labour than from all other fatal causes of parturition taken together." We, on the contrary, believe that puerperal inflammations are much more frequent and fatal.

In the second chapter, our author condemns the custom of the early retirement of the obstetrician after delivery, "since hæmorrhage may occur on the termination even of the most favourable labour." It would appear, by this statement, that hæmorrhage is a frequent occurrence after natural labour, which no man, in extensive practice, will admit, nor any work, of any value on obstetrics, inculcate. Four cases are detailed in proof of the position, but these are so loosely given that it is impossible to say whether two were or were not natural labours: one of the remaining two was an arm presentation; the other a twin case, and of course neither favourable nor natural labours. We fully assent to the position, "we should remain with the patient at least an hour, or an hour and a half, after delivery," though in general, if proper directions be given after the conclusion of a natural labour, and after the expulsion of the secundines, such delay is quite unnecessary. On the other hand, in all tedious cases, such attendance is indispensable.

In the third chapter, the application of a bandage during labour is recommended, a practice long since abandoned in natural cases, and only useful when the abdomen is pendulous, or the labour tedious. Mr. Ingleby ought to be aware, that few obstetric writers recommend a bandage in natural labour at present, because millions of women do well without it, as also the lower animals. The management of puerperal women immediately after delivery is accurately described, except in the concluding paragraph, in which a typographical error renders the sense unintelligible. After enforcing the necessity of the recumbent posture, for at least a week after hæmorrhage, our author observes,—“ Since, the uterus being longer under these circumstances in attaining its natural size, the vessels do not collapse in the usual time *and prolapsus is the consequence.*” He surely does not mean this, we should think, as the state of the uterine vessels cannot, under any circumstance, cause prolapsus, which, in this instance, arises from the want of any support which the uterus suffers, when the woman assumes the erect, or semi-erect, position immediately after delivery. We have elsewhere fully considered the evils consequent to errors on this point.

The succeeding chapter is on the occurrence of menstruation during pregnancy, in which the author relates the case of a lady, mother of seventeen children, who menstruated regularly the two first months of her several pregnancies, and who, during the last three gestations the catamenia occurred regularly up to the ninth month, and bore every physical sign in colour, quantity, and incoagulability. We have lately met with a similar case, and it was with great difficulty the lady could be persuaded that she was pregnant. She was delivered of a full-grown healthy infant. Mr. Ingleby opposes the dogmatical fiat of Professor Hamilton, “ that it is morally and physically impossible.” Some valuable remarks follow, upon

the states of the system during pregnancy and parturition, which favour hæmorrhage. Our author advocates small bleedings in cases of plethora, especially when the patient has laboured under menorrhagia previous to conception, and thinks by such means abortion and hæmorrhage will be prevented. He also advises venesection, in the last months of gestation, upon the same grounds. A case is related in which large quantities of aqueous fluid were discharged at the sixth month, and continued every third day in the proportion of from a pint to a quart, at each time, *from the uterus.* At the ninth month she was delivered of a child unusually large. “ At the second pain the secundines were spontaneously expelled, my hand receiving the mass at the outlet, lest its weight should tear the membranes. I then carefully examined the whole, and in addition to the aperture in the membranes, made by the passage of the head, there was a circular one very distinct, just at the edge of the placenta. From this aperture, doubtless, the fluid had from time to time escaped the patient, prior to each evacuation, being sensible, by a kind of passive contraction that it was about to come away.”

This case is considered dropsy of the amnios; but we cannot assent to the conclusion, in consequence of the loose way in which it is detailed. We are not informed whether the amniotic sac presented in the usual way during labour, which leaves the rest of the case obscure. We believe the weight of medical authority is against the notion, that the amniotic membrane can be ruptured, and gestation continue for one or many months afterwards. Puzos describes four cases in the two last months of gestation, in which the fluid was situated between the amniotic membrane and the uterus, natural labour took place at the ninth month, and the amniotic sac presented unbroken. Hildanus relates a similar case of aqueous discharge at the fifth month, attended by labour

pains: gestation was continued to completion. Mercier mentions a twin case, in which a sac presented after the birth of the first infant, from which ten pints of fluid were discharged containing some albumen: this sac was also expelled. There is a translation of an instructive essay on this disease in the 4th vol. of this Journal, 1830, from the German of Dr. Geil of Heidelberg; another in Dr. Ryan's Midwifery, third edition; and a third in the Dict. Abrégé des Sciences Médicales, Art. Hydrometre. Professor Burns is also of opinion, that the fluid is not amniotic.

The succeeding article is on the management of labour, with a view of preventing hæmorrhage. Cases are related, to prove that quick labours are frequently followed by hæmorrhage. Our experience is against this conclusion. We have attended several women whose labours were quick, but no hæmorrhage took place. Neither can we agree with our author when he doubts the declaration of the late Mr. White, of Manchester, that in natural labours he never had occasion for the manual extraction of the placenta. We believe ninety-nine practitioners in a hundred are of this opinion. We cannot help observing that there is a disposition to find fault with the writings of his predecessors too apparent on the part of our author, which is much to be regretted. This pervades his entire work, and is often exerted where there is little or no occasion.

When hæmorrhage has followed the birth of the child in former labours, our author recommends a bandage to be applied above the pubes, and regulated pressure to be made with both hands, so as to confine the uterus within the false pelvis, and thus prevent coagula forming and distending its parietes. Now, in such cases, we adopt a plan much more efficacious than this, namely, exhibiting the secale cornutum to the fullest extent before the birth of the child, and thereby insuring uterine contraction. We have witnessed many cases

in which this method succeeded, though manual pressure and the bandage did not prevent dilatation of the uterus on former occasions. This plan was also adopted by Dr. Blundell in the case of a lady, who, on the preceding delivery, had been saved by transfusion, and with the greatest success. Uterine action had ceased from the apprehension of the patient, when the head pressed on the perinæum. The secale was urged to the full extent; the delivery was rapid; the secundines speedily followed; the uterus was contracted; and there was no hæmorrhage. The case occurred in the practice of Mr. Burton Brown, of Blackfriars Road.

When vomiting occurs during the latter months of utero-gestation, and defies all remedies, our author seems to agree with Dr. Conquest, that rupture of the membranes, for the induction of premature labour, is advisable. The majority of obstetric writers are, however, silent on this point, perhaps from the great rarity of its occurrence.

We have next a description of the phenomena produced by syncope, more especially in relation to their suppression of hæmorrhage. Mr. I. agrees with Dr. Conquest in opinion, that in cases of exhaustion from large losses of blood, stimulants are improper; and, in proof of his assertion, he cites two cases, in which the exhibition of brandy renewed the bleeding. We certainly should not follow his practice at the bedside with the apprehension of asphyxia before us. In such cases our author is a strong advocate for large doses of opium, and judiciously remarks, that whatever may be the theories as to its action, its beneficial effects as a cordial cannot be doubted. We fully agree with him in advising the frequent and sudden application of cold in certain cases of hæmorrhage; but must demur to the implication that Gooch had the merit of recommending the cold dash upon the naked abdomen. Professor Hamilton had advised it many years previously. An interest-

ing case is narrated in which iced water taken into the stomach proved effectual in preventing hæmorrhage, in a patient who had repeatedly suffered from it on former occasions.

Our author considers the influence of uterine contractility in arresting flooding, and alludes to the cases in which fetuses were expelled after death, as related by Harvey, Baudeclocque, Kok, Denman, and Dewees. He then exemplifies the truth of our critical charge, his disposition to doubt and find fault, as appears by these words:—"If this account is true, it furnishes additional evidence that the uterus is muscular." We are free to admit that scepticism is extremely necessary in examining the numerous modern "false facts" which daily occur in medical writings; but on a fact so palpable as that under notice, it is, in our opinion, unwarrantable and undeserved.

The next chapter is on the circulation of the ovum, in which most of the received opinions are given, but there are many omissions. There is no mention made of Dr. Holland, M. Velpeau, &c.

The next chapter is on the influence of the *secale cornutum* over uterine contractility. Here our author frequently contradicts himself, as appears by the following passages:—"The ergot often induces violent uterine action." In the succeeding sentence but one, we are informed—"I have generally found its effects uncertain. On some it acts, on others it is inert. In many instances it either produces no effect at all, or is too transient in its operation to promote the expulsion." Now we conscientiously aver that we have never met a case in which that medicine, if good, had failed to produce increased uterine action, and to expedite delivery. If the ergot be genuine, and preserved in a stopped bottle, unexposed to air and moisture, we are as convinced of its efficacy as of that of any medicine in the pharmacopœias; but if kept in a drawer it speedily becomes inert and useless. In nu-

merous cases we have been informed that it had failed to produce any effect, but in every one we discovered that it had been improperly preserved; and many of our informants have since found it invaluable, when kept in the manner already mentioned. It is also to be recollected, that obstetrics formed no part of the medical or surgical education four years ago, and hence a vast number of practitioners are unacquainted with the principles and scientific practice of midwifery, and the consequence is, that they employ the ergot empirically, often prematurely, or in preternatural cases; in the former it may fail, if carelessly preserved, or cause rupture of the uterus in the latter; or it must fail to effect delivery in cases which require manual or instrumental aid. It is not long since a writer in one of the journals dispraised the remedy because it did not excite sufficient uterine action to propel the infant's head through a contracted pelvis, though he was compelled to admit he was ultimately obliged to perform craniotomy. We have heard of a case in which an ounce of this medicine was given without any effect; and our answer was, it was either adulterated or inert, for had it been genuine it would have destroyed the parent and offspring. The fact is, that it is almost impossible to procure a genuine medicine in this country; the sale of drugs with us is a matter of trade, and not of science; and this state of things is allowed to exist by the College of Physicians and Apothecaries' Society, who have full power to prevent it. Such is the gross neglect of these lethargic bodies in a country that boasts of superiority in science, literature, the arts, commerce, and every thing. But to return to our author—we find him stating that the uterine action induced by the ergot is not strong, being without any *perfect intromission*.

This has never occurred in our practice, and is explicable by the too extensive exhibition of the remedy. "In hæmorrhages arising after deli-

very, and in cases of retained placenta in abortions of four or five months, the ergot has proved of decided efficacy," p. 83.—"As to the practical deductions from the foregoing remarks, I would observe, that additional experience is wanting to confirm the utility of the ergot in uterine hæmorrhage; implicit reliance cannot be placed upon it—at present it must in this respect be regarded of doubtful efficacy." This is mere gratuitous assertion, and should have been corroborated by much personal proof. Had Mr. Ingleby exhibited the medicine properly preserved and prepared, in a large number of hæmorrhagic cases, then his evidence would be valuable; but in his chapter he has not given a single case in which he tried it. We find that most of the eminent obstetricians of this country, and of all other parts of Europe, have attested the value of the remedy in the cases under notice, and therefore our author should have been careful in his conclusions. Time nor space does not allow us to analyse his work any farther at present, but we shall resume our remarks as early as possible.

In conclusion, we are bound to state, that the author has evinced much judgment in the various and embarrassing cases detailed in his work: and though we cannot agree with him on many points, we think highly of his production. It exhibits extensive research, sound judgment, and sober and repeated observation.

The Dublin Journal of Medical and Chemical Science; exhibiting a Comprehensive View of the latest Discoveries in Medicine, Surgery, Chemistry, and the Collateral Sciences. May, 1832. Hodges and Smith, Dublin; Longman and Co. London.

WE hail with pleasure the continuation of this interesting and scientific journal; the contents of the first and second numbers sufficiently evidence

that the Irish members of the Medical Profession, can support a periodical of their own, if they will, and we sincerely hope that the success of this journal will stimulate them to even greater exertions. The original articles in the number before us are seven, and have some of the most distinguished names in Dublin attached to them. The spirit and zeal for science which the conductor of this journal displays, will, we have no doubt, ensure him the patronage and good will of the whole profession.

The first article contains *cases of aneurism*, by James W. Cusack, Esq., reported by W. Campbell, M.R.I.A., with remarks. The cases are three in number, and occurred from bleeding; they were all treated successfully. This is followed by *clinical observations on the exhibition of opium in large doses, in certain cases of disease*, by William Stokes, M.D.; a most interesting essay, and one which the profession will duly appreciate. Dr. Montgomery furnishes the next essay, *on spontaneous amputation of the limbs of the fœtus in utero, with an attempt to explain the occasional cause of its production*. He relates a case in which distinct threads of organized lymph were passing from the hands to the legs, and causing constriction around the limbs so tightly, as to prevent further development, and he is inclined to believe that the limbs would have been spontaneously amputated had the process continued: the case is illustrated by a plate. Dr. Graves follows next, with *observations on the treatment of various diseases*, in which we have several interesting cases detailed, which we shall notice hereafter in all probability. Mr. Newton then relates an interesting case of diseased heart, accompanied by angina pectoris, exemplifying the effects of the hydrosulphuret of ammonia, and in which this medicine was productive for a time of some benefit, but the sufferer suddenly died. "On opening the pericardium the heart was found enormously increased in size. This enlargement was principally at

the left ventricle, the parietes of which were very much thickened; the cavity was not much larger than natural; the right ventricle was dilated, and its parietes slightly hypertrophied; the auricles were healthy; no valvular disease could be detected either in the heart or arteries. There was a very slight atheromatous deposit in the aorta immediately beyond the semilunar valves. The arteries of the neck, chest, and abdomen, presented no lesion of structure."

This is followed by *contributions to pathological anatomy*, by Richard Townsend, M.D. M.R.I.A., containing two cases of spontaneous rupture of the heart; one of spontaneous rupture of the aorta; aneurism of the arch, and asphyxia, produced by tubercular masses compressing the pulmonary veins, and preventing the return of blood from the lungs. *A case of collapse after parturition, in which cold aspersion was employed with the most marked success*, by G. P. Hayden, Esq., closes the department of original articles in this number.

The extracts from the various periodicals are well chosen, and add considerably to the value of this truly scientific and valuable periodical.

Substance of the Investigations regarding Cholera Asphyxia, with cases and dissections, communicated by Professor Delpech, and Dr. Coste of Montpellier, and Dr. Lowenhayn of Moscow, during their residence in this country. To which are added, Observations on the Disease in Edinburgh, and the neighbouring districts, with numerous cases and dissections. By JOHN LIZARS, Professor of Surgery to the Royal College of Surgeons, Surgeon to the Royal Infirmary, and one of the Medical Officers to the Cholera Hospital, Drummond Street, Edinburgh. Hamilton, Edinburgh; Smith and Son, Glasgow; Simpkin and Marshall, London. 1832. pp. 72.

So many works have been recently written on cholera, that the subject has become as tedious as a thrice-told tale, and, were it not for certain circumstances connected with this pamphlet, we should be inclined to lay it by, without further notice than the mere expression of our opinion concerning its merits or demerits; but the excitement its appearance produced in Edinburgh, both in and out of the profession, and the consequences which ensued, were such as to require a far more extended notice than we should otherwise have given.

In the first place then, Professor Lizars adopts the term, *cholera asphyxia*, as his nomenclature for the disease, and which appears to us to be far more expressive of the real nature of the malady, if the prefix *cholera* is to be retained at all, than any other appellation we have yet heard applied.

The dissections, &c. by Delpech, Coste, and Lowenhayn, are first given, and from these we may gather that the semilunar ganglion is very generally diseased, in some cases enlarged and red, very frequently infiltrated. That the system of the great sympathetic is primarily affected in cholera, is not a new idea with these gentlemen, it occurred to Dr. Loder of Moscow, and Mr. Bell of Edinburgh has broached a similar doctrine, although he does not carry it to the same extent; at the same time, it is more than probable that Delpech and his *confreres* were unaware that such opinions had been previously formed, and if so, the merit of originality still, in a great measure, belongs to them. We have lately seen the statements of M. Delpech flatly contradicted, and we believe the article we allude to, appeared in a periodical, since dead, yclept the *Cholera Gazette*. The writer had the boldness and folly to assert, that the celebrated Delpech mistook something else for the semilunar ganglion, and that this latter was not diseased!!!—*Proh Pudor!* Without expressing an opinion as to the correctness or incorrectness of

M. Delpech's theory in regard to cholera, we cannot help saying that his reputation is so well established, and he is so well known to the profession all over the world, that the puny efforts of this writer, whoever he may be, will not derogate in the least from the influence which an opinion formed and expressed by that gentleman, after the most mature investigation, will always carry with it; and neither will he be able to persuade his professional brethren that M. Delpech does not know the situation of the semilunar ganglion.

The symptoms of this epidemic so closely resemble those which, reasoning from analogy, we should imagine would be produced by a dangerous affection of the involuntary nervous apparatus, that we cannot help subscribing so far to the doctrine promulgated by these distinguished gentlemen, as to record our belief that the ganglionic system is primarily affected, and that the other systems become diseased secondarily; at the same time, we do not wish it to be understood that we intend to locate the disease in the semilunar ganglion, in fact, to "give it a local habitation, and a name." The theory advanced by M. Delpech, appears to be confirmed by the experience of Professor Lizars, who details the autopsic examination of eleven cases, in which the ganglionic system was found more or less affected. The dissections were, for the most part, conducted by Mr. Lizars himself, and each occupied several hours; from that gentleman's well known attainments as an anatomist, it is, we think, very improbable that any one will assert that he mistook something else for the semilunar ganglion.

We are unable, from want of space, to follow Mr. Lizars through the theory which he has developed from the facts which we have stated; but there is one circumstance narrated to which we cannot avoid alluding. It is well known that the urine is suppressed in cholera, and it appears from Dr. Christison's experiments on

the serous effusion in the brain, that it contains urea. We are happy to be enabled to inform our readers that Dr. Christison is prosecuting some researches on the blood of cholera patients, and we hope shortly to be enabled to lay the results before them.

The opinions expressed by Professor Lizars respecting contagion, are advocated now by the majority of the profession in these and other countries. He is one of the staunchest non-contagionists we have ever met with; but why need we cite individuals as non-contagionists, when it is well known that twenty-nine out of thirty are such? There is a subject touched upon by one author, which will go far towards explaining the obstinate adherence of the London Central Board of Health to the dogmata of contagion. He says,

"I feel confident, then, that the evils of this disease have been tenfold increased by the dread of contagion; and this remark suggests to me the painful necessity of fearlessly delivering my sentiments on a much agitated question, in regard to which, I must say, the public mind appears to have been egregiously abused. I little dreamt, that a man openly charged with *procuring* evidence in favour of contagion being a vital accompaniment of the epidemic fever of Gibraltar, would have been appointed by the enlightened government of this country, even to examine, far less to decide on a point, of such vital interest and importance to this commercial country, before cholera had made its appearance among us. Supposing the allegations as to the self-interested motives of this individual to be utterly unfounded, they ought to have been held as an insuperable objection to his being employed on this occasion, so long as they remained uncontested and disproved; while, on the other hand, it might have been expected, by an unbiassed mind, that the special influence of his committed opinions, if allowed to operate, would give rise to some such miserable and destructive regulations, as have been entailed

upon us by the Central Board of Health, and the late act of parliament relative to cholera.

“Mr. Fraser, late surgeon of the Civil Hospital, Gibraltar, in his review of the *facts* brought forward by Dr. Barry, relative to the late epidemic fever of that garrison, thus expresses himself :—‘ Dr. Barry has so misstated facts, and so darkened many of the most important truths, relative to the history of the epidemic in question, that I fear it will be impossible to enter into an analysis of his paper, without the appearance of personality. I shall only observe, once for all, that my object is *truth*; and if *this* is not to be found (as some have stated) in the arguments, either for or against contagion, to whom are we indebted for so grave a charge? Certainly, not to the non-contagionist. Before the arrival of Dr. Pym in the garrison, towards the termination of the malady, the word contagion had nearly become obsolete. So clear and satisfactory were the proofs of the endemic origin of the disease, to those who had witnessed its rise and progress, that no one doubted the accuracy of this doctrine; and Dr. Barry himself, soon after his arrival, drew up a paper, setting forth a variety of arguments corroborative of the same.’ What motive could have induced the latter gentleman to change his mind? When were quarantine laws made in this country? When was a quarantine board established? Who are its members? Men are fallible mortals. —Self-interest, pride, vanity, ‘ vaulting ambition,’ will make medical men rat like politicians.”

This passage speaks volumes: we dare not trust ourselves to comment on it.

The last division of the work contains the treatment recommended by the Professor, and closes with the history of two cases successfully treated.

This, then, is the work which excited the deadly ire of the lawyer censor of the medical press in modern Athens! This the work which sub-

jected its author to the rebuke and a threat of punishment from Lord Hope, the *lawyer* presiding over the Medical Board of Health, and which he has dared to style an imprudent, inflammatory, and dogmatical essay!

Were a medical man dogmatically and imprudently to condemn and abuse a law-book, who would be so ready to attack him for his deed as my Lord Hope? And yet this lawyer, without any pretensions to medical science, sets himself up in defiance to the opinions expressed by the Edinburgh Medico-Chirurgical Society, and pronounces *ex cathedra* on the merits and demerits of a work, concerning the immense value of which he can have no idea. We cannot help thinking that it was intended to degrade Mr. Lizars in the eyes of those of his medical brethren who were present; but if so, the Lord President overshot his aim, as these medical gentlemen were far more degraded by their disgraceful silence, than Mr. Lizars by the contumely heaped upon him. Had this lawyer been employed in the courts of law, instead of taking a place where he had no business, it would have been more creditable to him. In conclusion, we think the Scotch medical profession should pass a severe censure on the President for his insolent conduct. We repeat Mr. Lizars' admonition, *ne sutor ultra crepidam*.

Placental Presentation—Perforation of Placenta—Arrest of Hemorrhage—Approaching Asphyxia—Transfusion—Recovery—Delivery—after Hemorrhage—Re-transfusion—Internal Hemorrhage—Death. By Dr. BLUNDELL, Dr. RYAN, and Mr. AUSTIN, M.R.C.S.

Mrs. ———, æt. 41, the mother of ten children, is now in the seventh month of utero-gestation. On the 24th of April last Mr. Austin, of Red Lion Street, Clerkenwell, was called to visit her at half-past seven:

in the morning. He was informed that she had had frequent gushes of blood from the uterus during the last week, and a slight sanguineous discharge several times during the last month. This morning she fainted, which excited alarm. On examination he found the os uteri dilated to about the size of the disc of a shilling, but very rigid, and the placenta fairly implanted over it. He exhibited brandy and nutriment, and sent for Dr. Ryan at half-past eight. The symptoms now were, ex-sanguine countenance; great restlessness and jactitation of the limbs; pulse small, soft, irregular, and intermittent, varying between 120 and 130, and repeated fits of fainting. On making a vaginal examination, the former diagnosis was fully confirmed. After the most mature deliberation on all the bearings of the case, it was considered by Dr. Ryan and Mr. Austin, 1st, that the stimuli should be continued as freely as possible in small repeated quantities: 2ndly, that as asphyxia was imminent, and the os uteri rigid, delivery was impracticable, there being the strongest reason to believe that death would take place before its accomplishment: 3rdly, that the *secale cornutum* should be given to the fullest extent to induce uterine action, and that, as there were frequent gushes of blood, it would be advisable to pass a finger through the placenta, to let off the amniotic fluid; and then if uterine action were excited, which was extremely doubtful from the state of prostration, the pressure of the presenting part of the infant against the placenta might be sufficient to suppress the hæmorrhage, or perhaps effect delivery. The operation was performed at half-past nine o'clock, four scruples of the *secale* having been given previously, after having been infused in ʒij . of water. There was great difficulty experienced in effecting the formation of an aperture through the placenta, and most fortunately during its accomplishment uterine action commenced. The

waters were fully expelled; about four ounces of blood were lost, and then the hæmorrhage entirely ceased.

The symptoms of approaching asphyxia became now much more formidable; the pulse was absent at the wrists; the extremities cold; the respiration laborious; the face and lips blanched; but no hæmorrhage. The stimuli were continued, warm flannels were applied to the hands and arms, and bottles of warm water to the feet and epigastrium. What was to be done under such circumstances? Any attempt at delivery was totally impracticable, as death would most probably take place before the introduction of the hand for the performance of version could be accomplished. The constant use of the stimuli restored the circulation; the pulse returned at the wrists, and a slight improvement was obvious; but this was transient, as the worst symptoms re-appeared in a few minutes.

Under such circumstances it appeared to Dr. Ryan and Mr. Austin, that transfusion alone could preserve life; and as the family were most anxious about the patient they were made fully aware of her condition, and of the nature and chances of transfusion. They were also informed, that if they wished to have the advice of any other medical gentleman they were at perfect liberty to call in whom they pleased. After some consideration they determined to send for Dr. Blundell. That gentleman arrived at half-past twelve. On hearing an account of the symptoms and treatment, he approved of every thing which had been done, and assented to the opinion that transfusion would probably be required; but it was deemed proper not to have recourse to it until there was no other hope. It was agreed to by all, that the stimuli, &c. should be tried some time longer. About two o'clock, p. m., death seemed to approach, and the operation of transfusion was determined upon.

Dr. Blundell having adjusted the transfusing apparatus, Dr. Ryan

opened a vein in the arm of Mr. Goddard, assistant to Mr. Austin, while Mr. Austin held the patient's arm. At a quarter past two, the first quantity of blood was injected into the patient's arm by Dr. Blundell; the operation was continued for twenty minutes, when eleven ounces of blood had been successfully employed. At ten minutes to three, the patient rallied a good deal, complained of headache, the colour returned to her cheeks and lips, the pulse gradually returned, the improvement steadily increased from this time, and the patient said "she felt much better than during the day, she could now see distinctly;" and the respiration became more natural. At half past three the pulse was 85, and the respiration 25, the rally was quite complete, and never was there a case more gratifying to the medical attendants, or more clearly evincing the utility of transfusion.

So far, then, all was well, with the exception that the fœtus was still in utero; and the great question to be determined was, whether it was more judicious to remove the infant, or to allow it to remain for some hours, or until next morning. Every bearing of both questions was maturely considered. It was urged, that as complete renovation of the vital powers had taken place, and as the great prostration had most probably rendered the os uteri dilatable, that a cautious delivery was advisable; for if it were deferred, and hæmorrhage should recur, the favourable moment for the operation would be lost, and the patient might die undelivered; or should transfusion be necessary immediately after the removal of the fœtus, it might be successful. Delay was, therefore, extremely dangerous. It was considered that if the brandy was repeated, and a strong decoction of the *secale cornutum* administered, uterine action would be secured after the operation of version, and, that there was a reasonable hope that the danger of after-hæmorrhage might be obviated.

The unanimous opinion of Dr. Blundell, Dr. Ryan, and Mr. Austin was, that although there were risks in both practices, immediate version offered, on the whole, the fairest chances of success; and that leaving the case for hours to nature would be an unjustifiable proceeding, being the greater evil of the two.

At half-past four, p.m. a drachm of *secale cornutum* was decocted in four ounces of water, and administered. Dr. Blundell proceeded with the greatest caution to perform the operation of version, Dr. Ryan fixing the uterus by pressure on the abdomen, and Mr. Austin consoling the patient and watching the pulse. The infant was speedily extracted without violence, and about two ounces of blood were lost. The uterus was firmly contracted by the action of the ergot, and, to make assurance doubly sure, it was deemed advisable that Dr. Ryan should make moderate pressure above the pubes. She bore the operation uncommonly well, and had some brandy in small and frequent doses.

Within twenty minutes of five, soon after the delivery, Dr. R. found the pulse becoming weak and small, and requested Dr. Blundell and Mr. Austin to examine it. Dr. R. then exclaimed that the uterus was dilating, and hæmorrhage taking place, which was found to be too true by Dr. Blundell. The symptoms became, if possible, more alarming than ever, and it was agreed, after some hesitation, to transfuse again. Dr. Blundell prepared the syringe, and Dr. Ryan bled Mr. Goddard (Mr. Austin's assistant) in the other arm. Mr. Austin consoled the patient, and watched the pulse and countenance. Twelve ounces of blood were transfused with proper caution in the course of ten minutes, but were not well circulated, and no decided advantage was obtained. The patient complained a good deal of pain in the abdomen, which was first referred to the uterus, and which was ascribed to the ergot. She then suddenly

complained of pain in her legs, arms, and abdomen, and seemed to suffer much more than patients usually do, when sinking collapsed. The uterus was contracted. At this time, five minutes to five, she gasped, moaned, and appeared to be moribund. The uterus now dilated in defiance to pressure, and internal hæmorrhage took place. She expired at five precisely.

It was the firm conviction of the medical attendants that transfusion would have saved her in the first instance, had not after-hæmorrhage taken place; and perhaps in the second instance also, if there had been sufficient vascular power to have given a full circulation to the blood. The rally after the first operation, as before observed, was striking and complete. It may be right to add, that both times the operation was delayed till there really seemed to be no other hope.

Case of Uterine Hæmorrhage with attachment of the Placenta to the Cervix Uteri, in which the plug was employed with very marked Advantage. By JOHN INGLEBY, Esq., Lecturer on Midwifery at the School of Medicine, Birmingham.

ON the 26th of April, at the request of Mr. Heeley, surgeon of this place, I visited Mrs.—— a very delicate woman, whom he was then attending in labour, and who had reached the full term of utero-gestation. It appeared that the patient was seized three weeks previously with a copious hæmorrhage, which subsided under medical treatment, and did not return until nearly one o'clock this morning, when Mr. Heeley was again called in. The labour pains were feeble, and the discharge very considerable; this, however, subsided at half-past two. At four o'clock the pains had ceased altogether, but the discharge had materially increased, and, as the patient had begun to vomit, a small dose of laudanum was

administered—I was called to see her at seven. The bed and bedding were soaked with blood of thin consistence, and possessing little coagulation, but the active hæmorrhage had again materially diminished. The os uteri was quite lax, dilated about the size of a half-crown, and several small coagula had collected over it. On passing my finger about an inch and a half beyond the uterine orifice, I detected an edge of the placenta quite detached. Nearly the whole of the child's head was above the brim of the pelvis. The patient was faint and cold, the countenance exsanguineous, the respiration very quick, the pulse undulating, and so feeble and frequent, as scarcely to be numbered, or felt with distinctness, though Mr. Heeley, on one occasion, counted 150 beats in the minute. Under an impression, that immediate delivery in this state of exhaustion would be fatal,* and fearing to allow even a draining to go on, I resolved, with Mr. Heeley's concurrence, to use the plug. Having steeped a large and soft silk handkerchief in olive oil, I conveyed as much of it through the os uteri, between the foetal head (which was rather loosely situated) and the detached portion of placenta as seemed to be necessary, and fifty drops of laudanum with some hot brandy and water were now administered. In about an hour the pulse had improved, and as the plug had begun to excite uterine contractions, I thought it prudent to withdraw it, lest an additional mass of placenta might be separated by the action thus induced. I found the os internum rapidly dilating, the head had almost passed the brim, and the membranes were partially on the stretch. I immediately lacerated them, and a

* Although the head was entering the brim, yet, from the great relaxation of parts, I could have passed my hand in utero very readily; possibly, the long forceps might have been used with effect, on account of the dilatable state of the os internum. But any agitation of body might have proved fatal at this juncture.

large quantity of water was at once discharged. It was unnecessary to apply the short forceps, for the hæmorrhage had now entirely ceased, and the pains were so efficient that in less than half an hour from this time the child was born living, but so feeble, that the usual resuscitative means were unavailing. The placenta was soon expelled. The portion which seems to have been detached on the occasion of the first hæmorrhage was marked on its foetal surface by a defined circular depression. This part was of an oblong form, was two inches wide, and about an inch and a half deep. It presented a disorganized appearance, being yellow in patches, like curd or lymph, brown in other places, and having a few scarlet and elevated spots interspersed; a fresh placental detachment covered on its maternal surface by a thin layer of coagulated blood, gave rise no doubt to the present hæmorrhage. The patient is suffering from the effects of loss of blood—the disease described by Dr. Marshall Hall.

Reflections.—In the consideration of this case, two points seem to suggest themselves: the one refers to the hæmorrhagies being three weeks distant from each other, and the serious effect which the second flooding produced upon the system; the other has reference to the value of the plug when employed during a state of collapse.

[This case was received last week, but came too late for insertion.—Eds.]

Medico-Botanical Society,

May 8th, 1832.

EARL STANHOPE in the Chair.

THE minutes of the last meeting having been read and confirmed, and several gentlemen admitted as visitors for the evening—

Dr. Ryan, the Professor of Materia Medica, delivered a lecture on the

therapeutical effects of hydrocyanic or prussic acid, for which the thanks of the Society were awarded him.

Dr. Sigmond, the Secretary, then read a letter from W. H. Hardy, Esq. lieutenant in the royal navy, dated Walburton, near Arundel, Surrey, describing a new remedy for scurvy. It is the juice of the fruit of the *Rubus Vulgaris*, or common bramble, concentrated by boiling; or, in case the fruit cannot be obtained, a decoction of the young leaves is the best substitute. The diseased parts are to be bathed with this three times a day, while the supertartrate of potash, conjoined with a cordial, is administered internally, and if the bowels require it, jalap may be added. Lieut. H. has never known this treatment fail, even in the worst cases. As no change of residence, diet, or regimen is required, it is peculiarly adapted to the poor, who are especially affected by this disease. Lieut. H. did not intend to offer any explanation of the mode in which the remedies acted, either singly or conjointly. He has been assured, by a gentleman on the continent, that a strong decoction of the common bramble was successfully employed in the treatment of dysentery. Dr. Sigmond then proceeded to read some observations by Dr. John Hancock on the *Oubridi*, or great Cashew tree of Guiana. The essay gave a full description of the botanical characters of this tree. Dr. H. believes that it is a species of the genus *Anacardium*, of which there is at present but one known to botanists, the *Anacardium Occidentale*. It is the largest tree in the forest, frequently rising to upwards of 100 feet in height, and is five or six feet in diameter. It branches at about sixty or seventy feet from the ground. Rumour reports that it bears only once in three years, but this Dr. H. is inclined to doubt; and on mentioning the circumstance to Mr. Patterson, an old colonist, the report was fully contradicted. It is employed in dysentery and diarrhœa. It yields a pure gum, which is said to cure the itch and

other cutaneous eruptions, but it does not exude on the sea coasts.

Dr. H. concluded by earnestly recommending the Society to patronize a botanic garden in Demerara; in forwarding which measure, he stated, that the governor and principal planters would willingly co-operate.

Thanks were directed to be returned, and the meeting was then adjourned.

THE

London Medical & Surgical Journal.

May 12, 1832.

THE ANATOMY BILL.

THIS Bill progresses steadily in the House of Commons, and has been so mutilated already that it will, in all probability, be so modified before its arrival in the Upper House of Parliament, as to be totally changed from the original; and there it will be still further metamorphosed, so as to be rendered entirely new, or perhaps unsuited to the object for which it is intended. It is admitted, on all hands, that some legislative enactment is necessary for the protection and promotion of the study of Anatomy in this kingdom, and for the prevention of the atrocious crime of Burking. The great difficulty is to frame a law which will satisfy vulgar prejudice, and, at the same time, sanction the practice of Anatomy. This difficulty could be readily surmounted if our Legislature would take the laws of France, or of America, as precedents.

In both these countries, all the unclaimed bodies of those who die by disease, or by suicide, are transmitted to the medical schools for the pur-

pose of undergoing anatomical examination. This practice is by no means repugnant to public taste, because when there are no relatives, or friends, to claim the dead, there is no outrage upon personal or public feeling. It would be ridiculous to argue that this country should not imitate the laws of other nations. It would be equally as absurd to contend, that we should not adopt the great improvements made in the sciences and in the arts, because some of these had been made in other countries. Suppose a disputant were to contend, we must not sanction, recommend, or adopt, the safe and painless operation of lithotrity, because it is a French discovery; but we should continue to practice the method of our countryman Cheselden, though more dangerous, and decidedly the most fatal proceeding in the whole domain of surgery. Would not the man who held such an insane opinion, be laughed at by every one endowed with reason and a proper feeling of humanity? Assuredly he would: and yet what difference is there between the opinion of such a person, if any can exist, and those who maintain that we must not follow France or America, in legalizing anatomical dissection? Are we to stand still, while all other nations are in rapid motion in the glorious work of improving the condition of mankind in every way which wisdom and philanthropy can devise? Such an idea is totally disproved by passing events. The horrible crimes which have been perpetrated, on account of the defec-

tive state of the law, as to practical Anatomy, must be prevented by the Legislature; and none but political partizans, disappointed aspirants to place and pension, or illiterate persons, can oppose the Anatomy Bill. It must be passed to prevent the atrocious species of murder called *Burking*; and it must be passed for the protection of the public health, and for securing to the poor the aid of properly educated medical practitioners. The legalization of the study of Anatomy is much more important to the wants of the middle and lower classes of society than to the upper class, who can always procure the best medical advice. In fact, every human being in the kingdom is interested in the passing of this Bill into a law, inasmuch as the preservation of health is the chiefest temporal concern of all. What is man without health? Is he not miserable in every situation, from the palace to the cottage? Though this is a truth, which no one can deny, yet there are persons so stupid and ignorant as to oppose the only measure which can ensure the preservation or restoration of health, the study of Anatomy—the foundation of medicine and surgery. As well might a lowly workman cast an artist's glance over the vastness of St. Paul's, and rise to its sublimity, as a man ignorant of Anatomy attempt to comprehend the inimitable grandeur of the corporeal edifice of his species, and feel the beauties and super-excellence of its fabric.

It may be asked by our opponents,

how is it that medicine and surgery have been so successfully cultivated under those penal statutes, which are proposed to be removed? We reply, that medical education has been, and is, so defective in London as to compel our students to visit Dublin and Paris, in order to acquire a proper knowledge of Anatomy. At this moment there are hundreds of English students in both places seeking for those advantages which are denied them at home. These and numerous other facts which might be adduced prove the indispensable necessity of facilitating the study of Anatomy in Great Britain. Let it be remembered that the scientific practice of medicine is of inestimable value to every individual, of whatever rank or condition; for from the first moment of life to the last hour of existence medical skill is required to preserve health, to arrest the progress of disease, and to smooth the approaches of death. Hence the esteem and veneration entertained by mankind of all conditions, for the faculty. In all civilized nations they are encouraged and protected, and every impediment removed which in any way impedes their progress.

QUACKERY IN ENGLAND.

FROM the earliest periods of human history, to the present time, we find traces of empiricism among mankind. In all enlightened and highly civilized nations, quackery is chiefly encouraged by the ignorant and the illiterate; though it has invariably many

protectors among the pusillanimous and timid of the educated and learned. The audacious quack assails the weak side of human nature; he solemnly promises a cure, when the medical practitioner declares no hope remains. It is inherent in human nature to cling to life, it is pardonable and right to allow it every possible chance; and hence the rule of medical ethics, or the institutes of professional conduct, which hold that a sick man has a right to have what advice he pleases; though in charity he must be cautioned against the pretensions of ignorance and knavery. There is no greater delusion than to suppose, that an ignorant illiterate individual can form a correct notion of the structure, uses, derangements, or restoration of the numerous and complicated organs of the human body; or of the innumerable productions of every range of the creation, which are subservient to the preservation or restoration of health, or the palliation of painful disease. It has been admitted by the most celebrated divines, lawyers, and philosophers, that the study of medicine is the most abstruse and difficult of all the sciences. Nevertheless, the unlettered quack attempts it, and pretends to excel the man who spends his life in its pursuit; for he is infallible, he can cure incurable diseases. Such is the blindness and credulity of the public, that multitudes believe him—nay, will even swear to his infallibility. We have lately witnessed the amplest attestation of this fact at the trial of

St. John Long, at the Old Bailey, on which occasion many of the nobility and of the affluent absolutely swore that he could cure consumption—a disease which defies the ablest physicians in existence, and of the nature of which the *curer* knows as much as an ourang-outang. Almost every street in this metropolis is infested with a quack of equal pretensions; and so numerous are these assassins at present, that they destroy more human beings than the sword, famine, and pestilence united. In general the ignorant poor are the victims; occasionally, the rich and affluent. They manage these things better in France, where quacks are sent to the galleys. The Royal College of Physicians in London have ample power to suppress quackery; but they most unaccountably neglect their duty. The law empowers them to frame a pharmacopœia; but it also encourages quack nostrums, by granting patents, and by which, according to the last parliamentary return, a revenue of 30,000*l.* a year are derived. This sum is paid in England alone, exclusive of puffing advertisements, so we may safely infer, that quackery is worth 100,000*l.* a year to the revenue of the country. Every wretch has a fine field open to him, he can fearlessly style himself doctor, take out a patent for some wonderful medicine he has discovered, and puff it off in the newspapers (first, paying the Government stamp-duty of course;) and publish to the world, an infallible cure for a dozen incurable diseases. The bait is swallowed, nine-

tenths of the community being amused with the marvellous, and Dr. Puff defies the world.

Another very extensive class of medical pretenders are those who assume the titles of surgeon and accoucheur; for any man who pleases may do so. A good example is afforded by a man who keeps a fruit stall opposite his door, not very far distant from St. John St. Old St., who has an attractive brass plate on his door, with the words "Mr.— man-midwife and accoucheur." A chemist's errand-man, gets tired of his occupation, leaves his situation, and goes to reside in a distant part of the town. He is immediately metamorphosed into "a surgeon, accoucheur," by the magic power of the painter and engraver, and he may slay his Majesty's lieges "in and within seven miles of London," without fear of, or molestation from, the Colleges of Physicians, Surgeons, or the Apothecaries' Company. Now we ask an enlightened legislature, is this state of things to continue? Is it right or just, that one man will be hanged for stealing a few pounds, and another escape all punishment, who lives by injuring the health, or destroying the lives of those who come in his way? If the medical corporations have power to abate these enormous evils they should be compelled to exert it; or be deprived of all power; which should be entrusted to others more worthy of possessing it.

USE OF STIMULANTS IN DISEASES OF THE EYE.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I HAVE perused with considerable interest, many of the lectures given in your valuable periodical, one or two in particular from Messrs. Lawrence and Guthrie, on some diseases of the eye. On the subject of purulent ophthalmia, these gentlemen present us an happy example of the difference of opinion taught and practised, as to the treatment of this serious disease. On the one hand, Mr. L. adheres to the antiphlogistic plan, and seems to retain his old attachment to the *Lancet*, and other debilitating means, even in a patient represented to be in a reduced state. He is still unable to persuade himself to try the astringent mode, and although he expresses himself ready, he avoids doing so; notwithstanding his consciousness of the injury done to the constitution, by large and repeated bleedings in a disease usually occurring in persons not very robust. I trust you will obtain for us the result of the case which formed the subject of Mr. L.'s lecture, that we may be enabled to judge of his practice, compared with the case from Mr. Guthrie's practice.

On the other hand, we have Mr. Guthrie recommending the stimulant plan, and wishing to set himself up as the discoverer of this mode of practice. He tells us that in 1801, crossing the Atlantic, he first used the tinct. opii to drop into the eye; because he had read that Mr. Ware had recommended the vinum opii, and yet, forsooth, he wishes to claim the originality of the practice, in spite of the previous admission that he acted on Mr. W.'s recommendation—to say nothing of the facts alluded to in the History of the Slave-ship, where the negresses had used the lemon juice in the very disease in question, and most successfully. So far from Mr. Guthrie possessing any

claim to originality, even his present practice is but a modification of the treatment of Dr. Ridgeway, quoted by Mr. G.; and it must require a stretch of ordinary credulity, to believe that the nitrate of silver can be of any more use mixed up with grease, than dissolved in water in proportionate strength. I fear if Mr. G. duly considers his own statement, he will hardly expect to have the principle left him which he contends for. In endeavouring to displace the principle from Mr. Guthrie, I willingly leave him the credit of having laudably followed up the practice, and of having shown it to possess a very great and most decided advantage over the opposite practice of Mr. Lawrence and others.

Trusting you will afford these remarks a niche in your columns, I subscribe myself, Gentlemen,

Your most obedient servant,
A STIMULATOR.

April 24th, 1832.

OBJECTIONS TO VALSALVA'S TREATMENT OF ANEURISM.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,
ALLOW me to offer an objection to Valsalva's treatment of aneurism, which occurred to me long ago, but was again revived by reading that part of your review of Dr. Hope's work on this subject.

The principle in the treatment is to induce the formation of layers of coagulating lymph in the sac. How is Valsalva's method to be reconciled to this principle, when we know that repeated bleedings very much diminish the coagulating part of the blood?

I am not aware of any case where dissection has shewn that this treatment produced the desired effect. It is true that cases are recorded, where the symptoms have been considerably relieved; on the contrary, competent observers have not witnessed any

such results, and the best authorities seem decidedly averse to this treatment.

The separation of the fibrinous part from the other constituents of the blood, I apprehend only takes place in a certain condition of this fluid. In our dissections we sometimes meet with fibrinous flakes in the heart and larger vessels. How is this brought about? Certainly I cannot conceive it to occur when the blood is in that weak attenuated state, which must be the case, when the method of Valsalva is had recourse to.

Should some person more able than myself be led to pursue this inquiry, the purpose of your correspondent will be answered.

GULIELMUS.

May 7, 1832.

LIBRARY AT THE ROYAL COLLEGE OF SURGEONS.

A GREAT deal of abuse has been heaped upon the Court of Examiners and Council of the Royal College, by those who have never attacked the entire medical character of the country for their illiberality, &c. *Audi alteram partem.*

The splendid library of the College has been thrown open to the members, articled pupils, and all medical students who apply to any of the examiners or committee for admission tickets; and every attention is paid to the applications of visitors by the excellent and learned librarian Mr. Willis; we are, therefore, mortified to learn that the degraded crime of theft renders the following notice necessary.

“NOTICE.

“Whereas some books belonging to the library have been taken away, contrary to the rules established for its security, by some person or persons as yet unknown,—

“This is to give notice, that, upon

the detection of any such offender or offenders, he or they will be prohibited from the future benefit of the library, and such other proceedings instituted against him or them as the legal advisers of the College may deem proper.

“ By Order of the Board
of Curators,
“ EDMOND BALFOUR,
“ Secretary.

Hospital Reports.

GUY'S HOSPITAL.

Abscess round the Knee-Joint—Incision—Cure.

ELIZABETH SIMMONDS, ætat 19, admitted under the care of Mr. Bransby Cooper, Jan. 27th, states that about a week ago she experienced great pain and tenderness about the knee-joint, which prevented her from following her usual employment. She attributes the cause to a great deal of kneeling, necessarily experienced from the nature of her employment. The inflammation extended, and was accompanied with loss of appetite, languor, and the usual symptoms of fever.

*Hirudines xij. genu. Cataplasma. Haust.
Sennæ ad sedes.*

29.—Pain somewhat relieved ; but evident fluctuation is perceptible all round the joint, apparently superficial. An incision was made, and about four ounces of pus escaped from the abscess.

Mist. Salina Atis horis.

31.—Considerable discharge ; pain lessened ; great depression.—*Pergat.*

Feb. 2.—Much the same ; has had no sleep during the night ; discharge rather less.

Julep. Ammon. Atis horis.

Cal. c. Opio sing. gr. 1, h. s.

4.—Much better ; A bandage applied round the knee to bring the sides of the abscess in apposition.—*Pergat.*

6.—The discharge of pus has ceased ; but a large quantity of serous fluid, quite coagulable by heat, was secreted.

R. Infus. Rosæ c. Quin. Sulph.

She rapidly recovered.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

THE table of contents of your last number (May 5) refers to a case of *tic douloureux* cured by quinine. The symptoms there described have no relation whatever to that disease. Really, your reporter should be more careful in giving names to diseases, for some persons might be led to suppose that Dr. Sigmond himself described the disease as *tic douloureux*, whereas I know the skill and experience of the doctor are such as not to allow him to fall into so great a mistake. I think he would have called it *hemisrania*.

Νοσολογος.

FATAL CONSEQUENCES OF EATING SORREL.—A gentleman at Paris, being afflicted with a phosphate of lime calculus, was advised to make use of sorrel (*l'oseille*), which contains a bin-oxalate of potash, for the purpose of getting rid of his painful disease. He partook at his meals plentifully of this article of diet, which is in common use at Paris. In a short time the symptoms were aggravated considerably, and he died. On examination it was found that the calculus had acted as a nucleus for the oxalate of lime which had been formed in the system, and a mulberry calculus, by far the most painful and dangerous of all, was the result.—*Mr. Everitt's Lectures.*

The theory of this decomposition is as follows ; the oxalic acid in the sorrel has a greater affinity for the lime than the phosphoric acid, which unites with the potash, and forms a soluble salt, while the oxalate of lime is deposited around the calculus of the phosphate of lime, and the mulberry concretion is the result

Royal College of Surgeons.

LECTURES

ON THE

ANATOMY AND DISEASES OF THE EYE,

DELIVERED BY

G. J. GUTHRIE, Esq., F.R.S., V.P.R.C.S.

Lecture the Fourteenth.

MR. PRESIDENT,

RHEUMATIC iritis resembles, in many respects, other inflammations of the same part; it is attended, however, by some peculiarities, both in relation to symptoms and treatment which deserve remark.

The intolerance of light is always very much greater than in the syphilitic inflammation, so that the patient prefers a dark room, and cannot sometimes bear the admission of a ray of light to the eye without shrinking from it, and this when the redness of the part seems to be comparatively trivial, a few red vessels running in straight lines, and converging to the edge of the cornea, being only to be observed. The flow of hot tears is also considerable, especially on raising the lid to expose the eye, and continues for sometime afterwards. The circumorbital pain is more harassing and excruciating if possible; there is also pain felt more positively and sensibly in the eye itself, and the examination of it often brings on a painful paroxysm, although it were at ease before. The change of colour in the iris is peculiar, partaking more of a greenish hue than in any other cases, in which such a shade can take place, and the change in the colour occurs earlier, and continues longer, without further mischief following, than in the other kinds of iritis. The iris loses its smoothness and natural brilliancy, but it becomes very little furred. Lymph is deposited very sparingly, and although the pupil is contracted, and loses its defined edge, it is not loaded, as in syphilitic iritis, with adven-

titious matter, constituting one of its distinguishing characters. The pupil loses its natural black colour as the disease proceeds; a net-work of vessels may be observed passing across, and it gradually becomes more contracted and irregular; but this change takes place slowly, the pupil in the beginning, and several days after the change of colour in the iris, being occasionally even larger, and certainly not less, than usual. The aqueous humour becomes turbid, and the cornea loses its transparency. If the disease proceeds unchecked, the eyelids participate in a greater degree in the complaint, the conjunctiva is more extensively affected, the eye is redder as well as the lids, the secretion from them is changed, and the edges adhere to each other in the morning; circumstances which may take place at an earlier period of the disease if the iritis has been combined with common catarrhal inflammation, a complication which is not unusual where the disease has been caused by exposure to cold winds and rain, as by sitting on the outside of a coach. In pure rheumatic cases, where the iritis seems to be a change of the seat of rheumatism from one part of the body to another, these latter symptoms are not so obvious, and are sometimes not present. One great peculiarity is the indisposition for the deposition of lymph, which is so soon effected in syphilitic iritis; another is the peculiar firmness of the adhesions when they do take place, which is the reverse in syphilitic iritis. The sudden changes which take place for the worse, and without any apparent cause, mark also its rheumatic character. The slightest exposure, by leaving off an accustomed covering to the head or eye, or even by changing from the bed room behind to the sitting room in front, being often sufficient to cause a recurrence of pain, if not a relapse of inflammation. These recurrences in poor people often lead to mischief, and render it doubtful whether the remedies employed are doing good or harm, and I suspect tended to cause those opinions which have been entertained as to mercury being a cause of iritis.

In these cases the change of colour in the iris becomes permanent, the pupil is contracted to a point, is very irregular at its edge; the iris bulges in places, becoming altogether more convex; vision is lost, and as the intolerance of light subsides, and the patient can keep his eye open, the alteration of structure can be readily observed.

In a sharp attack of rheumatic iritis there is always fever; if the disease be also catarrhal, the symptoms of that derangement often accompany it. The fever is more marked and more inflammatory, demanding general and repeated bloodletting, the use of colchicum, antimony and opium, and cupping behind the ears, but not on the temple, as it appears to me to increase the pain in the generality of instances. Leeches to the temple, and in the situation of the malar bone, do good, as well as blistering at a later period. Calomel combined with the antimony and opium in large doses, exerts great influence over this disease, and its symptoms usually subside as soon as the effect of the mercury becomes apparent; and although a relapse takes place, after a day or two, the repetition of the mercury will still have a good effect, leading to the belief which has been entertained that it was the bane as well as the antidote. It is in rheumatic cases, whether catarrhal or not, that I have given the turpentine largely, and where the stomach will bear it, with the best effect; but it is unnecessary to repeat what I have said on that point already. I differ particularly on the application of the belladonna, with many of my contemporaries in this rheumatic species of iritis, and never use it when its application is followed by an increase of pain, recurring to it only when the violence of the inflammation has been subdued, and then in the most cautious manner, lest it should cause a relapse. The best external applications are warm ones, and a flannel bag filled with hot bruised poppy heads and chamomile flowers, seems the most commonly preferred; but this is a matter of choice with the patient. In pure rheumatic cases I have always combined the bark with the mercury and the opium with the best effect. I have rarely used the bark alone, although I have seen some cases in which, combined with local treatment, it has proved efficient; and some of my friends rely upon it alone from the commencement, only having recourse to the hydrargyrum, or other means, if it fails. If quinine be used, it should always be combined with the powder of yellow bark, and with a sufficient quantity of opium to procure rest. Rheumatic iritis is a disease prone to recur, and often difficult of cure. A change of climate does good in removing the disposition for its return; and an issue in the arm I have known to prove an effectual preventive.

I am not unmindful of that kind of iritis which follows typhus fever, and to which

Mr. Wallace, of Dublin, has particularly drawn our attention. It is of rare occurrence in this country, the poor generally obtaining that assistance during the disease, and in the state of convalescence, which prevents its formation. It is usually preceded by symptoms of defective vision, or amaurosis; but the inflammatory symptoms may come on at once, after an interval of time which may be longer or shorter after the original fever. This inflammation very much resembles the syphilitic; but the absence of any syphilitic history, which in every case of iritis should be duly inquired into, and the previous occurrence of fever, with the deranged state of the patient's health, will generally point out the right course to be followed, viz. bark, mercury, and opium. Mr. Wallace relies on bark alone. I am disposed to recommend mercury and opium to be conjoined with it. The mercury to be given in a moderate dose at night, and the opium in sufficient quantity to obtain rest; the external applications at the pleasure of the patient. Amaurotic affections, like those of hearing, memory &c., and which so often occur after severe fevers, are, I believe, best treated at first by change of air, diet, regulation of the bowels, tonic remedies; and lastly, by bark, opium, and mercury, in the manner already alluded to, if the others are found to fail.

Scrofulous iritis is a disease much talked of, but rarely seen as an original affection: as far as I am acquainted with it, the complaint has always been an extension of disease from other parts, and not properly an inflammation commencing in the proper substance of the iris, and extending from it to them.

Iritis, as in idiopathic disease, is, I think, very rare in children, although in them scrofula predominates. I have never happened to observe a case of pure iritis, or one unaccompanied by other symptoms of disease, in the same way as we see a syphilitic iritis, and, consequently, I say it is a very rare disease. In all the cases I have seen, and they are of daily occurrence, the inflammation has been either pustular in the first instance of the conjunctiva, terminating in ulcers on it, or on the edge of the cornea, or there has been inflammation of the cornea itself. The treatment, then, of the scrofulous iritis merges in that of the general disease, of which it is merely a superadded symptom, requiring perhaps a little more active treatment, and which original disease, viz. strumous or scrofulous corneitis, I must now proceed to notice.

Corneitis, or inflammation of the cornea, may take place from a variety of causes, although it is generally caused by exposure to wet and cold. In children, among whom it generally prevails, there is usually a strong scrofulous disposition present, and frequently manifested by disease in other parts. It generally commences in one eye, but the other is seldom exempted from it, and it frequently continues for months, nay, for more than a

year, and in some cases of poor persons for a longer period of time. Under the most favourable circumstances it is often a very intractable disease. It commences at once by depriving the cornea of its natural polish; the loss of brilliancy is accompanied by a corresponding defect of transparency, and the cornea is often described as being generally hazy; a pink zone of vessels is seen around it, existing evidently in the sclerotic coat, with others extending from the zone to the circumference. The anterior ciliary arteries are those most frequently enlarged; the intolerance of light is sometimes considerable, and continues for a long time, and even when relieved is very apt to return. The secretion of tears is augmented, and they are hotter than usual. The secretion of the aqueous humour seems also to be increased in quantity; and I have been disposed to believe, that this has occurred from irritation having been communicated to the ciliary processes, which, with the iris, soon become to a certain degree implicated, the iris very early showing a slight degree of change of colour, although its substance is very seldom so fully affected as to constitute a fair case of iritis. The pain is referred to the eye itself and to the forehead, and in old cases, after a relapse, to the temple and cheek. The disease to which I allude rarely causes ulceration of the cornea, in the common sense of the word; small sand-spots, or dots frequently take place on the surface of the cornea, as if affecting merely the superficial covering, but a deep cup-like ulcer, the result of corneitis, is not common, and the disease which gives rise to it is much more easily cured. The cornea, on the contrary, is more disposed to become vascular, and turns red. I have a patient now attending at the hospital, whose corneæ some years ago became as red as blood; this colour gradually changed to a dense white, the cornea taking on the appearance of the sclerótica, and it was a long time before its transparency was in part recovered, a spot at the under part of the cornea being still white and of course opaque. If the disease be cured in a few weeks, nothing may remain except a tendency for a relapse, but if it continues much longer, the cornea is apt to lose its proper form, to protrude generally, and become in part opaque; the vessels in the sclerótica remain permanently enlarged; it assumes a bluish hue around the cornea, is evidently thinner, and the choroid coat, whose vessels are enlarged, shines through it. Vision is much impaired, and every common cause of inflammation gives rise to a recurrence of it. In some cases in children, the disease becomes indolent, and gives little inconvenience, except that which arises from defective vision. The cure, I have said, is difficult, and not always to be accomplished by the same means. One method has cured one case shortly, but the very same means have failed when the other eye has been attacked, and in direct succession.

I usually begin by abstracting blood, if the child or young person is tolerably strong, and this should be done by leeches, or by cupping, which I prefer in general, to three or four ounces in children, to be followed up by tartar emetic and sulphate of magnesia at night, so as to cause both vomiting and purging; these may be repeated until the more active symptoms appear to diminish, when calomel should be administered, with small doses of opium, until the mouth is affected. If the second or other eye is affected in succession, the cupping can scarcely be had recourse to, although leeches may be applied, and the mercury is by no means so beneficial as in the first attack. Under these circumstances I generally combine it with quinine, and have recourse to blistering on the temple, alternating it with blisters in the arm, with great attention to the bowels, to the state of the skin, to the diet, and to air and exercise. It is the proneness to relapse which causes so much inconvenience, giving rise to a recurrence of the disease, almost without any obvious cause. Iodine given internally has not appeared to me to possess any heroic qualities, although an ointment composed of the hydriodate of potass ten grains to a drachm of ung. cetacei, is beneficial in the latter stages. I have in adults met a relapse by puncturing the cornea with great advantage; in children it always does mischief. In the removal of the opacities of the cornea all the usual remedies may be tried in the latter stage. At an early period warm fomentations made of the decoct. papav. alb. with the ext. conii \mathfrak{z} j. to 8 oz.; or other narcotics do good; and an evaporating, or steaming lotion, made of mist camphoræ \mathfrak{z} vijss. tinct. opii. \mathfrak{z} ss. is often very advantageous. I have lately tried a lotion, at the recommendation of Dr. Seeds, of the navy, composed of liq. ammon. \mathfrak{z} vij. sp. æth. sulph. \mathfrak{z} vij. sp. camphor \mathfrak{z} j. with benefit in the early stage of this disease. It relieves pain always, and in some mild instances is equal to the removal of the complaint. It should be applied around the eye every two or three hours.

IODINE IN BRONCHOCELE.

BRONCHOCELE.—M. Guibourt is of opinion that iodine is of much greater value than burnt sponge, especially if given in an aqueous solution, according to Lugol's formula, instead of forming an alcoholic tincture, as Conidet employed it at last. *Bull. Gen. de Therapeutique.*

A
LECTURE
ON THE
THERAPEUTICAL EFFECTS OF
HYDROCYANIC ACID,

DELIVERED

*Before the Fellows of the Medico-Botanical
Society of London, May 8, 1832,*

BY MICHAEL RYAN, M.D.

PROFESSOR OF MATERIA MEDICA TO THE
SOCIETY.

MY LORD AND GENTLEMEN,

In accordance with the arrangement agreed to by your professors, I shall direct your attention this evening to the consideration of the therapeutical effects of hydrocyanic, or prussic acid, and the symptoms which it causes in man.

This singular substance is of great interest to the physiologist, to the medical jurist, and to the practical physician, and deserves especial attention. It has now a place in the Dublin, Parisian, Belgian, and American pharmacopœias, and is designated *acidum borussicum, seu zooticum, seu zootinicum, prussicum, hydrocyanicum*. It exists in some natural productions, as the leaves, bark, and fruit-kernels of certain plants, or may be formed by complex chemical processes. It was discovered as a vegetable principle by Bohn in 1802, and in the leaves of the cherry laurel by Schrader in the same year; in the peach blossoms and leaves by Vauquelin; in cherry-laurel water by Von Ittner; and in the bark of the bird cherry by John. In all these and in similar instances, it is modified by a combination with a volatile oil. The poison procured from them exists in two forms—a distilled water, and volatile oil. Its chemical history and tests have been so fully described in the last two lectures delivered before this Society, by my colleagues the professor of chemistry and of toxicology, that they need not be repeated on the present occasion. I may, however, mention that Scheele discovered this acid in 1772, and that Gay Lussac was the first who procured it in a state of purity. It is now known under two forms—the pure acid, and the diluted or medicinal acid. According to Mr. Everitt, the only process for procuring it of uniform strength is that proposed by Mr. Clark, which, on account of its simplicity and importance, I must mention. Dissolve 72 grains of tartaric acid in an ounce of distilled water in an ounce phial. Add 32 grains of cyanide of potassium, and then insert the cork or stopper, which, for a little time, must be kept in its situation with the finger. The phial is to be agitated and immersed in a basin of cold water, to repress the heat produced in

the process. When all action has ceased, set the phial aside in a cool and dark place for 12 hours; then decant the liquor, and preserve it in a cool and dark situation. In this process cream of tartar and hydrocyanic acid are formed. The former is precipitated, but the liquid contains about a fifth of a grain of it in a dose (supposing the ounce to contain 25 doses), which is so inconsiderable as to require no attention to be paid to it. The ounce contains about 13 grains of hydrocyanic acid, somewhat similar to that prepared according to Vanquelin's method. A full description of this process, and of the mode of preparing the cyanide of potassium, was published by Mr. Clark in the Glasgow Medical Journal for May, 1831, and will be found in the London Medical and Surgical Journal for June.

The chief objection to the use of this remedy is, the want of uniformity in its strength, which renders it either too powerful or totally inert. This arises from its having no place in the London pharmacopœia; and, therefore, those who vend medicines may supply a very diluted acid, which is useless, and this is too generally the case. The Dublin pharmacopœia gives a formula for its preparation, which is not followed in this part of the United Kingdom; and, in order to remedy the evil, those who have confidence in prussic acid generally recommend that prepared according to the formula of Scheele, though this is of variable density. For medical purposes, that procured by the method of Gay Lussac is preferred on the continent of Europe; but as its concentration renders it highly dangerous, it ought to be diluted with distilled water. Robiquet proposed to add to it two parts of water, and then it becomes similar to the acid of Scheele; but with the superiority of rendering a constant and well-known proportion between the pure anhydrous acid and the quantity of water with which it is mixed. Magendie added six times its volume, or eight times and a half of its weight of distilled water, and then designated it *medicinal prussic acid*. Others recommended three parts of water and one of acid, under the title of *acide hydrocyanique au quart*. In the Batavian and Bavarian pharmacopœias the acid is alcoholised (*hydrocyanicum alcoholisatum*), by which its active properties are better preserved, and its evaporation does not occur so readily as when mixed with water.

Hydrocyanic acid, when properly prepared, is limpid and colourless, having a pungent odour, highly irritating to the nostrils, with a peculiar sensation, extending down the trachea, and if inhaled incautiously and in large quantity, producing giddiness or faintness. Its taste is peculiar, resembling that of bitter almonds, or laurel leaves; and great caution is necessary in applying the undiluted acid to the tongue, as it is one of the most powerful poisons. The specific gravity of the medi-

cinal acid, prepared according to the Dublin pharmacopœia, is, to the specific gravity of water, as 998 to 1000; that of the acid prepared at the Apothecaries' Hall, London, is 995. This acid reddens litmus paper and freely unites with alkaline bases, forming hydrocyanates or prussiates, but it does not neutralise them, and consequently in many instances retains its energy, and is poisonous in most of its chemical combinations. The hydrocyanates of ammonia and potass, and the diluted acid neutralised with ammonia, have proved fatal, as attested by Coullon, Roubiquet, Magendie, Scubarth, and Professor Christison. According to the statements of the last justly-celebrated toxicologist, the triple prussiates or ferrocyanates do not possess deleterious properties. My able colleague Mr. Everitt, informed us, in a late lecture on the composition of hydrocyanic acid, that it was not decomposed by alkalies, neutral salts, or perhaps tartarized antimony, and therefore we should remember this important fact in prescribing it in extemporaneous formulæ. He also stated that this acid will decompose even in a phial, with a glass-stopper, unless the neck of the bottle be immersed in a vessel of water, and unless the light be excluded. As it rapidly evaporates when the pharmacist opens his phial for the purpose of measuring it, he should, in order to obviate this, keep only a small quantity for common use.

Action of Hydrocyanic Acid on Man and Animals.—Notwithstanding the vast improvements lately made in physiology and toxicology, the action of this acid on the animal economy is not as yet satisfactorily determined. Magendie, whose experiments with the concentrated acid are most satisfactory, states, that a single drop put into the throat of a dog, induced two or three hurried respirations, and then death; when dropped under the eyelid, death followed almost as rapidly; and when injected into the jugular vein, the animal dropped dead at the instant, as if struck with a cannon ball, or with lightning.* The experiments of Emmert, Coullon, and Krimer, as quoted by Christison, confirm the same conclusion. They observed giddiness, weakness, salivation, tetanic convulsions; and then increasing sensibility, which after some time went off rapidly, and was succeeded by convulsions and transient giddiness. These symptoms continued about half an hour, but might extend to a whole day or more, though death in general took place between the second and fifteenth minute; and if the animal survived for 32 minutes, it generally recovered. It has happened, however, that a dog survived 19 hours, but such a case is extremely rare. The general opinion now is, that the acid acts on the brain, medulla spinalis, and heart; and the conclusions of Dr. Addison and Mr. Morgan prove, I think be-

yond a doubt, that most, if not all poisons, act through the medium of the nerves, even when placed in the blood-vessels. The fatal effects of prussic acid, according to Brodie, Nyston, Weideman, and many others, are to be ascribed to the suspension of the cerebral functions. The pure acid, according to Magendie, exhausts the irritability of the heart and voluntary muscles so completely, that they are insensible even to the stimulus of galvanism. Coullon denies this, while Schubarth attests it. It is a singular fact, that the immediate application of nearly a drachm of the concentrated acid to the brain of a horse produced no effect, according to Viborg, of Copenhagen. A similar conclusion was made by Coullon, Crimer, and Emmert. This fact has led some physiologists to deny the action of the acid through the nerves, and to ascribe it through the medium of the blood-vessels. But it is to be recollected, that the nervules of the blood-vessels may account for the former opinion, a fact overlooked by many experimentalists prior to Addison and Morgan. In many instances the heart has been observed to pulsate regularly after the death of an animal, which induced some physicians to employ the acid in diseases of that organ. The best account of the symptoms produced in man are described by Coullon, as ascertained by experiment upon himself. "When he took," says Dr. Christison, "from 20 to 86 drops of the diluted acid, he was attacked for a few minutes with nausea, salivation, hurried pulse, weight and pain in the head, succeeded by a feeling of anxiety, which lasted about six hours." Such symptoms may be induced when the medicinal acid is pushed too far in treating disease. Salivation may likewise be produced, as attested by Macleod and Granville. A French physician, who swallowed a teaspoonful of the diluted acid, felt confusion in his head, and soon fell down insensible; the breathing was difficult, the pulse small, countenance bloated, pupils insensible and dilated, and locked-jaw supervened. He had several fits of tetanus, one of them extremely violent. In two hours and a half he began to recover his intellect, and rapidly became sensible; but for some days he suffered very much from ulceration of the mouth and violent pulmonary catarrh, which had evidently been excited by the ammonia given for the purpose of rousing him. He had eructations, with the odour of the acid, three or four hours after he took it; and during the earlier symptoms the odour was exhaled by the breath.* Professor Christison is of opinion, that "it is probable that very large doses occasion death in a few seconds; and, at all events, a few minutes will suffice to extinguish life, when the dose is considerable; but if the individual survive thirty or forty minutes, he will very generally recover." He is also of opinion, that the excessive ra-

pidity with which the acid proves fatal appears inconsistent with the notion, that it must enter the blood-vessels before producing its effects. According to Emmert, Coullon, and Krimer, the diluted acid acts most energetically through the serous membranes, and next upon the stomach; that it also acts with energy on cellular tissue; that it has no effect when applied to the trunks or cut extremities of nerves, or to a fissure made in the brain or spinal marrow; that its action is prevented, when the vessels of any part are tied, before the part is touched with the poison; that its action is not prevented by previously dividing the nerves, and that it may sometimes be discovered in the blood, after death, by chemical analysis, and frequently by the smell when an analysis does not succeed. The experiments which led to these inferences were made in 1805, 1819, and 1827, and are in a great measure refuted by those of Addison and Morgan, and by the undoubted fact stated by Magendie, of instant death taking place, which rendered the passage of the poison into the blood utterly impossible. The injection of the acid into the blood-vessels is the most fatal mode of applying it, and next perhaps the introduction of the vapour into the lungs. The effect is more rapid through the serous than through the mucous membranes, that of the lungs excepted. Roubiquet informed Professor Christison, that while making experiments on the tension of the acid vapour, his fingers, after being some time exposed to it, became affected with numbness, which lasted several days. This fact should not be forgotten when the acid is applied to the skin in certain cutaneous diseases.

Necrotomic Appearances.—It has been observed by numerous pathologists that after death by prussic acid, the blood is black, viscid, oily, and fluid; but it may coagulate after having flowed from the body, and even in the heart. It generally exhales the peculiar odour of the acid for 21 hours after death; as this is not invariably the case, more especially if the body be exposed to rain or a current of air, when the dose has proved fatal in a few minutes, the odour will be perceptible in the blood of the heart, lungs and great vessels; it however will soon disappear by the escape of the acid in vapour by the lungs. It is to be remembered that a similar odour may arise from the excrement, in cases of inflammation of the intestines or liver, a fact which is of great importance in medico-legal examinations. In general the vessels of the brain are congested; the nervous system is turgid, and the arterial empty throughout the body. The stomach has been found red in animals, and in one case the bile was of a deep blue colour. In some cases putrefaction was rapid, in others it progressed as usual. Drs. Hufeland, Paris, Marx, and others, maintain that the peculiar glistening of the eye, which renders it difficult to believe the individual is really dead, and is de-

cisive evidence of poisoning by hydrocyanic acid; but Dr. Christison states that death from carbonic acid or cholera, may produce the same appearance.

Therapeutical Effects.—From the preceding facts it has been generally admitted, that life is extinguished by this acid, by the destruction of the nervous energy, but as the circulation and respiration were observed to go on regularly, it was considered analogically that the acid would be useful in cases of excessive sensibility, and irritation of the circulatory and respiratory systems. It was considered a direct, and powerful narcotic sedative, and to have power to moderate the actions of the heart and lungs, to oppose the invasion of fever and inflammations. Accordingly the Italians strongly recommended it in acute and chronic inflammations of the lungs and heart, and especially in pulmonary consumption. Even Magendie was of opinion that it could cure consumption, if given in the first stage of the disease. This idea was not new, for Linnæus informs us that cherry laurel water was long used in Holland for this purpose. Experience has subsequently proved, that this acid possesses merely the effect of palliating symptoms. In its diluted or medicinal form, it is still strongly recommended in consumption, spasmodic asthma, hooping cough, spasmodic cough, in the numerous diseases of the heart, attended with inordinate action, in indigestion, to allay irritability of the stomach, heart-burn, hiccup, gastrodynia or pain in the stomach, in inveterate vomiting, in simple or painter's colic, in tic douloureux; and locally in diseases of the skin, as impetigo and prurigo, to abate itching, and in cancer of the womb, in the form of lotion. It is said to have a specific action on mucous membranes.

Dose and mode of administration.—From two to thirty drops according to the Dublin pharmacopœia; the smaller dose to be commenced with, and gradually increased. A drop is the ordinary dose used in London; it is given in a glass of water, in almond emulsion, or in infusion of cinchona. It is not decomposed by vegetable substances, or by many alkaline bases; when an over-dose has been taken, the effects are best counteracted by ammonia, brandy, and cold affusion. Murray, Orfila, Christison, and others, prefer ammonia—Coullon, Riantz, chlorine—and Granville, recommends turpentine—Herbst of Gottingen, and Orfila, the cold dash—and my colleague, Dr. Epps, relates a case in which he applied boiling water to the inferior extremities without effect; when scarifications were made, and the water re-applied with success. Artificial respiration should be likewise employed. My able colleague, your professor of toxicology, proposes an antidote in cases in which death does not take place rapidly, as when confectionary poisoned by bitter almonds, or the acid has been taken. He advises that a quantity of liquor potassæ,

properly diluted, should be swallowed, and then some ferruginous salt, containing protoxide of iron, such as the green copperas of commerce, by which an insoluble and innocent prussiate, would necessarily be the immediate result. The inhalation of chlorine or ammoniacal vapour, and cold affusion might be tried at the same time. The medical use of this acid is of ancient date. Bergius revived the exhibition of bitter almonds in ague. He ordered an emulsion of ʒij. in ʒij. of water, with ʒij. of extract of lesser centaury. Hufeland gave them in tape worm, and there are numerous preparations of them in the foreign pharmacopœias.

Notwithstanding all the encomiums bestowed on hydrocyanic acid, Professor Duncan considers it not to be a safe substance for general practice, and that there are two circumstances connected with it, against which the practitioner cannot guard, "that of being stronger than he anticipated, or what is fortunately much more frequently the case, of being much weaker or almost effete." These remarks are very true, but do not, in my opinion, warrant us in abandoning the remedy. Dr. Paris has also denied the efficacy of this acid in consumption; and contends that equal advantage will be derived from the use of conium, hyosciamus, and other sedatives. Dr. Granville, on the other hand, has maintained that the medicine affords the greatest relief in consumption, and details numerous cases, which bore all appearances of that disease, which were cured by it. As some of these, however, were combined with chlorosis, and as severe pulmonary affections are often present in such cases, there may be just doubt entertained on the opinion that such subjects were really phthisical.

I have employed the acid in combination with conium, hyosciamus, digitalis, and colchicum, in consumption and diseases of the heart, in general with great benefit, but occasionally without any good effect; and, in some instances, was obliged to abandon it from its deleterious action, or in consequence of idiosyncrasy.

Professor Elliotson has tried the acid in gastric affections with great benefit; and others have strongly advised it in obstinate vomiting consequent to pregnancy, or in ordinary cases. I have tried it in such cases sometimes with benefit, and sometimes without the slightest advantage.

I have also employed it both internally and locally in cancer of the womb, with much benefit; but in this, and in all diseases, we must watch its effects most carefully, and always direct, that should nausea, vomiting, head-ache, or giddiness supervene, the medicine should be immediately discontinued, and some brandy taken in the absence of the medical attendant. In some cases these symptoms have invariably supervened, and of course rendered the exhibition of the remedy unsafe and dangerous. In employing

it in lotions to cancerous ulceration of the womb, it must be very much diluted with water; we might commence with a drachm in a pint of water, a third part of which to be injected three times a day, carefully attending to the effects. Magendie recommends two drachms of the medicinal and a pound of lettuce water, in herpes, uterine cancer and scirrhus, and the acid may be employed to the extent of four drachms. Professor Thomson, of the London University, has advised it in the form of ointment, in the cutaneous affections already mentioned. On referring to the Pharmacopœia Universalis of M. Jourdan, and now translated by Professor Rennie, of King's College, I find that there are nearly sixty different formulæ for the preparation and administration of hydrocyanic acid, which cannot be noticed in an address of this description. I shall, however, conclude by reading a few of them which seem well worthy of adoption.

A

LECTURE

BY JOHN EPPS, M.D.

Delivered at the Medical School, Westminster Dispensary, May 7th, 1832.

On the Virtues of Valerian; the different varieties of this Root sold in the shops; the Heath Valerian the truly medicinal; the differences of opinion regarding the virtues of this plant explained.

"SCIRE vere est scire per causas," is a dogma, gentlemen, to which we cannot pay too much attention. The truth embodied in this is one in which the scientific mind delights, because the knowledge thus founded has an accuracy and a certainty which no empirical knowledge can ever possess. The state of mind connected with a knowledge of causes throws a light where formerly darkness prevailed, and imparts for vacillation a fixedness of purpose. To illustrate these remarks we may refer to VALERIAN. This article has had its day of glory and its day of dishonour; its virtues have been exalted by many of the fathers of the medical art: the moderns, for the most part, despise it.

How can this diversity in opinion be explained? Only by putting in force, in an examination of the plant, the adage "Scire vere est scire per causas."

Well, gentlemen, let us proceed to this examination. Before which, however, it may be useful to recall your attention to an article, called *extractum taraxaci*. You will remember, that, in treating on this, I stated that similar differences of opinion in regard to its virtues existed; and you will also remember, that Mr.

Houlton has solved the problem by proving, that the extract of dandelion, as prepared by the common process, is inert; whereas, as prepared by the process he recommends (and dandelion extract as prepared by his process, is to be had at Smith's, 10, Nutford Place, and Rose, 211, Tottenham Court Road); it possesses all the virtues which were ascribed to it. Now these circumstances, in regard to dandelion, have always acted upon my mind as an impulse to inquiry, whenever I found a great contrariety of opinion regarding the virtues of any particular medicine. Thus influenced, then, I began to investigate the subject of the virtues of valerian. I found, gentlemen, but little help from pharmacologies, or works on *Materia Medica*; works generally mere compilations. Nature, therefore, must be examined. I pursued the way in which she led, and found my goal. Previously to mentioning this to you, it may be advisable to enumerate some of the testimonies in favour of and against valerian.

Valerian is spoken of by Dioscorides, who derives its Greek name from $\phi\upsilon$ (Phu) on account of its smell. This writer, as well as Galen, mentions it as an *aromatic*; and this, gentlemen, I beg you particularly to bear in mind. Dominicus Panorolus published some cases exhibiting its use in *epilepsy*. Haller recommends it in *hysterical* affections, and considers it as useful in *epilepsy*. Fordyce, in his treatise on *hemisrania*, p. 91, praises it highly. Whytt, on nervous diseases, p. 513, states that he used it with success in *epilepsy*. He combined it with manna. Columna reports that he was cured of *epilepsy* by this remedy, after other remedies had failed. M. Merchant, in the *Memoirs of the Academy of Sciences*, relates two cases of *epilepsy*, where it was useful; the patients voided great quantities of worms; he always purged before using it. Dr. Withering recommends it as a laxative, and states that it acts when other means more violent have failed. *Catalepsy* was cured with it by Mr. Mudge; he gave $\frac{3}{ss}$ doses of the powder. Fordyce recommends it in *dullness of vision*. Dr. Home, of Edinburgh, who, though not esteemed an authority in matters relating to the practice of physic, is a very good authority in reference to *materia medica*, states that he has found benefit from the use of this medicine in nervous affections. I myself have seen many benefits from its use; and I have been much disappointed. Most

of the moderns condemn it. Dr. Woodville asserts that he has seldom found it answer the expectation of the prescriber.

Such, gentlemen, is the contrariety of opinion. The solution will interest you.

Three modes of solving the problem occurred:—

The first was—*May not the valerian root be gathered at the wrong season, when its virtues are nearly gone?* This, though affording in part the explanation, did not satisfy me, because I found that, sometimes from the yearly supply from the same herbalist, the utmost benefit, and sometimes no benefit at all, arose.

The second was—*May not the medicines have been given in too small doses?* This seemed to be a fair presumption; but, upon examination, the same irregularity in effect, during the use of large doses as of small, was observable.

The third mode, which I found to be true, was—*May not other roots, varieties of valerian, be mixed with the true root?* I entered upon the investigation of this, and, while thus engaged, happened to fall in, at a book-stall, with a pamphlet written by John Hill, M.D., on this plant, establishing my views on this medicine. This was published in 1758.

The species of valerian, referred to in the pharmacopœia, as producing the valerian root, is the *valeriana officinalis*. This is thus described by Sir Edward Smith:—"Floribus triandris, foliis omnibus primatis; foliolis lanceolatis subuniformibus." This description is not sufficient to characterise the true valerian. A plant may have all these characters, without possessing the virtues of valerian. The real plant was called *valeriana sylvatica major*.

There are three varieties of this species of valerian—the *heath*, the *wood*, and the *water valerian*.

The *heath valerian* is the one possessing the medicinal virtues in the highest degree; the *wood valerian* is considerably inferior; and the *water valerian* is still more so. Unfortunately the last is most easily obtained and most abundant, and hence there are fifty roots of this to one of the *heath*. Hence originates the uncertainty of effect.

Let us now, gentlemen, point out the distinctions between these varieties. These distinctions refer to the plants themselves and the roots. And first, in regard to the plants.

Heath Valerian—Character.

Height—Two feet to two feet and a half...
 Stalk—Dusky-green
 Lightly hairy
 Leaves—Smaller than the water.....
 Foliola—The little leaves, composing each of the larger leaves, of a deeper colour, narrower, and covered with white hairs..
 Flowers—Brighter red
 Clusters—Smaller than in the.....
 Seed—Small.....

Water Valerian—Character.

Four feet in height.
 Stalk, pale green.
 Not so thick.

} Larger: fresh pale green, and smooth.
 Flowers pale red.
 Seed—Large and soft,

The wood valerian has characters intermediate. The distinctions in regard to the roots may be averaged thus:—

Heath Valerian.	Wood Valerian.	Water Valerian.
Colour—Brown nearly olive	Tawney, or deep brown ..	Pale colour, nearly yellow.
Radicles—Long, slender, with numerous hairy threads	}	} Thicker fibres. More naked.
Roots { Firm	{	Tender.
{ Tough	{	Easily broken.
Smell { Fresh, aromatic..	{	No freshness; little aroma.
{ Slightly fetid....	{	Heavy fetid smell; cats busy themselves about this more than about the other roots.

These characters refer more exclusively to the recent roots. The dry roots may be distinguished also by the colours as above described, the hairy threads, and the toughness. The heath valerian root, when dry, has no cavity in the centre, as the water valerian has. In the former a circle of greenish, or pale hue, surrounding the pith, is observed; in the water, this circle is often black. The taste of the heath is spicy and pleasant, and, after, a little chewing, bitter and astringent, which is not the case with the water. If the root be dirty and dry, macerating the same in water will soon bring out the colour.

I hope, gentlemen, that this statement will put you on your guard in purchasing the roots. But with the view of still more deeply impressing on your mind the necessity of caution, it may be as well to mention who are the collectors, and some circumstances connected with the collection of the roots, which tend to occasion the introduction of the water instead of the heath valerian.

The collectors are, generally, very unfit for the employment; they are very imperfectly acquainted with botany, possessing but a very general knowledge of the external characters of the plant. Their object is quantity not quality. They take the roots which are most easily obtained and most easily drawn up. Now the water valerian, growing in clusters and in moist soil, is both most easily and abundantly obtained, and most easily drawn up. The heath valerian is more scattered in its growth, and growing in a close soil, the roots are more difficultly obtained. The collectors often draw up other roots. Dr. Hill states, that he raised a plant of the smooth water crowfoot (poisonous) from a root sold as valerian.

Another circumstance regulating the collection is, that the gatherers pull up the plant when it has shot up the stalk, which enables them to draw it more easily. Now the plant should be gathered soon after the stalk has begun to appear above the earth. After the stalk is fully risen the plant has lost much of its virtues.

Another circumstance is, that many of the

collectors know this plant only by its flowers. Hence they gather the roots when the plants are in a state of flowering, a period when the juices of the plant are exhausted; for, gentlemen, I think you must be aware, from your attendance on botany at this theatre, that, as the generation of a new individual is the grand end of the changes which the plant goes through, in passing to the state of flowering, and as all the energies of the plant are directed to effect this end, when the end is obtained, the roots can be of little or of no use. And to establish this more fully, let me remind you of the fact, that an annual may, by its flowering being prevented, be made to exist for another year; in other words, a plant, which, exhausting itself by flowering would die, is perpetuated by this exhaustion being prevented. Need I add any more to show the utter uselessness of valerian obtained from plants that have flowered.

Such, gentlemen, being the difficulties connected with obtaining true valerian root, it seems not at all astonishing, that such differences of opinion should exist in regard to the medicinal powers of this article of the materia medica. The middle of May is the time of gathering the plant.

The virtues of this medicine we shall enter upon at another occasion.—Part of a Lecture at the Westminster Dispensary, Gerrard Street.

ON RETRACTION & CONTRACTION OF THE FINGERS,

By T. SHELDRAKE, Esq.

REFERENCE to the figures in Paxton, will shew that the extensor digitorum communis muscle originates at the posterior part of the arm. It is attached superiorly to the lower part of the outer condyle of the humerus, to the aponeurosis of the fore arm, and to the aponeurotic septa of the different muscles in that region. From these several attachments it descends vertically, and at the middle of the fore arm the fleshy mass forms four ten-

dons, which pass under the annular ligament of the wrist. Below the ligament the tendons diverge, become broader, and proceed to the lower extremities of the metacarpal bones: sometimes send aponeurotic bands, more or less oblique, to each other. These tendons terminate on the back of the fingers by an aponeurotic expansion, reaching to the last phalanx.

This muscle is antagonist to the flexor digitorum sublimis vel perforatus, and flexor digitorum profundus vel perforans muscles, and is a beautiful proof of the accuracy with which nature, if we may apply that term to the universal Intelligence which has created all things, proportions the powers, given them to the uses for which they are designed. Thus the powers of the extensor muscles of the fingers, being only intended to draw them back when those muscles cease to act of themselves, but intended to put forth very great exertions under various circumstances, are more numerous, as well as of larger size and strength, than their antagonists, besides that they possess several peculiarities in their construction, which greatly add to their general strength, much more than would appear on a transient view of their parts. These will be noticed hereafter; but here it will only be necessary to say, there is reason to believe that this different strength of the two antagonist sets of muscles is frequently the first cause of those retractions of the fingers which are now under consideration.

It is a general rule, with respect to most muscles, but to those of the fore arm it is universal, that one end shall be large and fleshy in its structure, and the other smaller and tendinous. In the arm all the muscles are thick near the elbow where they originate, being united to upper parts of the bones, and are themselves fleshy, flexible, and tender. When they pass downwards, beyond the middle of the bones, they begin to separate from them, become surrounded with a sheath, gradually pass under the annular ligament of the wrists, the slits in ligaments of the fingers, and are inserted in the last phalanx of each finger.

Nearly all directing, bending, and extending actions of the fingers and wrist, are performed by bending the flexor digitorum muscles, which have been described, and it is effected in this peculiar manner.

It is the property of all muscles, when not impeded by any insurmountable obstacle, to perform their natural actions of extension and contraction, in a straight time, in the direction of the muscular fibres; but when such obstacles occur they contract as near to the straight line as those obstacles will permit. The consequence of that action is, that when a man grasps any thing firmly in his hand, as by closing his fingers round a stick that action is performed by the flexor muscles *only*; and principally by the fleshy portions of those muscles, which being firmly attached to the

bones, or other parts on which they originate, diminish in length, increase in thickness, and become tense, in proportion to the strength of the exertions made by the hand. Hence it is that men, who are constantly engaged in hard labour with their hands, always have their arms large, strong, and very firm in their texture, and which becomes natural to them.

The muscles and tendons of the fingers and hands exist under very different circumstances. The tendons, after they cease to be closely united with the bones, become enclosed in their own fascia, and pass, with little obstacle, to the ends of the fingers, to which they are strictly attached. Paxton has explained, that "the first phalanges, or rows of the finger bones, are attached to the metacarpal bones by loose but strong *capsular ligaments*, which are strengthened, anteriorly, by a *semicircular ligament*, embracing the anterior part of each articulation, and posteriorly by the extensor tendons, which expand very much while passing over these articulations; also at the sides by *lateral ligaments*, which are attached to slight depressions on the lower end of the metacarpal bones, and into the condyles of the first phalanx. Similar ligaments to these exist, as the articulations of the finger bones with each other; viz. each joint has an anterior ligament, two lateral ligaments, and a capsular ligament, or synovial membrane."

The flexor tendons are, also, confined in their course along the fingers, by *circular* and *vaginal ligaments*. The former adhere, on each side of the tendon, to the proper ligaments of the joint; the latter enclose the flexor tendons in a strong sheath. Each sheath is composed of circular fibres, and strengthened by oblique and circular bands, and is attached on each side to the ridge which separates the anterior concave from the posterior or convex surface of each phalanx: *by this means the tendon is confined in the MESIAL LINE of the finger*. All these sheaths are lined with a smooth synovial membrane.

After considering this statement, it becomes evident that if mischief be not invariably done, by dividing the ligaments, tendons, and muscles about the joints of the fingers, with the view of correcting any defect of their form or action, there is a very great majority of chances that such mischief will be done. I have often seen it attempted, but with very bad effect, and had the good fortune, very early in life, to cure those defects by that treatment which I shall explain.

The flexor digitorum muscles are very firmly attached to the last phalanx of each finger. They pass in perfect freedom through all those parts of the hand, above described from Paxton, and pass gradually from the state of fleshy muscles on the upper part of the fore arm. It is the nature of all muscles, when not improperly restrained, to

perform their actions of flexion and extension alternately in a straight line, between the two extremities, so that, if there were but one joint between the elbow and the end of the finger, and the muscle fixed at the two extremes should contract, it would be a straight line, forming a triangle of dimensions corresponding with the different lengths of the two sides, whatever the difference between them might be; but with the hand every thing is different. Three joints in each finger, and one in the wrist, bending at the same time, would render the limb useless to its owner, if they could not be connected by the admirable contrivance (a term which I must use for want of a better) by which they are rendered essentially obedient to the will in every respect. Two joints in each finger have by one motion, directly backwards and forwards, firmness equal to a complete *gyn-glymus*, which it cannot in strictness be called. The third joint of each finger, at its junction with the metacarpal bones and the carpus, has several motions peculiar to itself. All these are kept either in numerous actions, or in a state of complete rigidity, at their owner's will.

If a man, ignorant of these matters, grasp a stick in one hand so firmly that it cannot be forced from him, he will believe that he holds it by the strength of that hand; but it is not so, he holds it by the resistance of that fleshy portion of the flexor digitorum muscles, which is permanently attached to the bones of the arm. By the absolute contraction of this portion of those muscles, for the time being, the tendinous parts extending and firmly attached to the last phalanges of all the fingers, draw them towards the lower part of the hand, till the fingers come in such contact with the hand that they can go no closer. The tendons of these flexor muscles slide freely under the annular ligaments, and open in the tendons which allow them to pass. This being the case, what is to be said of the knowledge or judgment of those, who divide the muscles, ligaments, and tendons of the fingers to cure contraction, the cause of which does not exist in them?

A blow, a wound, dislocation, luxation, or some specific disease, may cause distortion, or contraction, or other derangement in the powers of the hands or fingers; but when this happens, such peculiarities become objects of treatment, quite distinct from the treatment of the distortion which will remain after these additional defects have been removed, and require its own particular treatment. Suppose any person to hold his hand willingly in the position in which the first patient I have described necessarily kept his, it would require a force in the flexor muscles of the hand, equal to that he intended to employ in retaining whatever he held in his hand; but the extensor digitorum muscles of the same hand only require as much power as will enable them to lift, or otherwise move the fingers or

hand after its release from the confinement in which it has been placed by the power of the flexors. The difference between the powers of these two sets of muscles is very great in every case where all the parts are healthy; but when that inequality be increased, by a trifling addition to the peculiarity of either side, defective action will begin, and if not timely removed by appropriate remedies, the inequality will increase till it becomes irre-mediabale.

An instance of this occurred in the first case I described. The extensor digitorum muscles, in every case the least powerful of the hand, became so weak, that when the patient's hand hung by his side, or when with the help of his other hand, it were laid flat upon a table, he could not, by any exertion of his mind, raise even a finger from the table. By applying his other hand, he could move that defective one from one part of the table to another; or he could, by lifting the defective hand, place it on the back of a chair, but when he left it, unsupported, it fell helpless to his side. The defect was at first only weakness in the extensor digitorum muscles of the hand, afterwards weakness of the biceps flexor cubiti was superadded.

It is a principle in the action of muscles, that when the whole person be at rest, every muscle remains in a state between flexion and extension, as we know to be the case when we lie down to sleep, because it is most easy to start from that state to any of the two others; but when the contractile powers of one muscle, or set of muscles, have been lost or destroyed, or interrupted, the external action of its antagonist is intercepted, and its derangement increased, till they become diseased, as was the case of all the patients I have described.

The first, from some unknown cause, lost the power of contracting the extensor digitorum muscles; their power is very small under any circumstances, but sufficient to extend the flexor digitorum muscles, when the will of the patient have relieved them from the effect of that power which it has chosen to exert upon them. These muscles being no longer subject to any countervailing force, first retracted, and then contracted themselves, so that the patient could no longer take a pen in his hand by its own exertion; but when with his other hand he had placed the pen in his hand upon the table and paper, he could by motions of the elbow and shoulder, contrive to write, something in the same way as a man with a wooden hand. This unnatural contraction being constantly progressive, the hand first, and then the wrist, became more rigidly contracted, and would have terminated in absolute destruction of the power of using the limb, had I not counteracted it.

The second case had become much worse, because all the fingers were so rigidly contracted that I could not force them open, towards extending them to become straight, with-

out causing much pain in the flexor digitorum muscles, where they pass under the capsular or annular ligaments of the fingers. The joint of the wrist was less rigid, the contractile action not having been extended so much (though all the muscles of the arm had become useless), that the patient could not make any rotatory motion of the hand by her own voluntary act, and she could not by her own exertion bend the elbow joint, because the power of the biceps flexor cubiti was so diminished, that it had not strength of itself to raise the fore arm, nor to support it when raised. With this view of the case, if the individual who attempted to prevent me treating this patient in my own way were at hand, I would ask him how it would have been possible to cure this defect by binding the arm and hand straight upon a flat board till they were quite well.

You will perceive that I am opening a different view of this subject from that in which it has ever previously been seen, and am desirous to make my explanation as satisfactory as my descriptive powers will enable me; however, I must encroach upon your patience by another communication.

No. 9, Upper Berkeley Street,
Portman Square.

P. S. Your anonymous correspondent who stated, in a paper on the Mind, that John Hunter had died suddenly in St. George's Hospital after a dispute with Dr. Pearson, is in error. The dispute was between Mr. Hunter and Mr. Keate.

CASE OF

POISONING BY PRUSSIC ACID;

BY M. LEURET.

ORFILA has given the history of poisoning by this acid,* and discussed the value of the different remedies that have been proposed for counteracting its effects; he has also established the great efficacy of chlorine, when it can be administered in time. The following is an instance where it was voluntarily taken, and found mixed in the stomach with spirituous liquors. Some chemical experiments, undertaken by M. Lassaigne, Professor at the Royal Veterinary School of Alfort, in order to detect the poison after death, are likewise detailed, as well as a method of proceeding, by which the acid was

discovered in several animals poisoned by it.

P——, about 30 years of age, of tall stature, athletic make, and sanguine temperament, worked in an apothecary's shop, and of course had under his care poisonous substances of various kind, preparations of opium, prussic acid, &c.—Several emulsions had latterly been administered, containing a few drops of this acid, which had been prepared by P——, he was therefore well aware of its powerful effects, when given even in minute doses. Supposing that he had reason to suspect his wife's fidelity, he counselled with a friend, about ten days before the fatal event, to whom he shewed a small phial filled with a whitish fluid, at the same time saying, that two drops of its contents would kill any man, and ten were sufficient to destroy a horse, and that if his suspicions should prove true, he would poison himself. After this an old acquaintance came to stay with him, and they passed all their time together, drinking to such a degree that he generally went to bed drunk. On the day of his death he dined with his wife and several friends; and while they were at dinner, observed, that he was well aware that his course of life could not last long, and that he reckoned on finishing it sooner than they expected. He passed the evening at the publichouse, and left it half drunk, at about a quarter to nine; at about half-past nine he came home. It is not known what he did in the intermediate time; for it could not have taken him more than five minutes to come home.

When he got into his room, he partly undressed himself, spoke to his wife, and went to bed. He then immediately fell into such a state of torpor that his wife became alarmed, and ran for a doctor, who lived in the same house. He did not, however, perceive in the condition of P—— anything more than the common effects of drunkenness. He roused him a little by dashing cold water over him, and went away. The patient, thus

* Annales d'Hygiène.

left to himself, relapsed, was seized with convulsions of the whole body, and died.

The corpse was nearly covered with an eruption (*herpes. pust. circin.*) ; generally pale, except on the left arm, where the colour was more intense ; the under surface was covered with bluish spots. The temperature of the body was the same as that of the surrounding objects ; the limbs were not very stiff ; the pupils were not dilated ; the face was neither tumefied nor red ; a strong smell proceeded from the mouth, similar to the breath of a person who has been drinking. The vessels on the outer surface of the dura mater were much injected. On the upper and posterior part of the right lobe of the brain was a small red spot of liquid blood, extravasated beneath the arachnoid. There was nothing remarkable in the colour or consistency of the cerebrum, cerebellum, or medulla oblongata ; but these organs, which had not at the time of examination quite lost their heat, had a well marked smell of bitter almonds, especially in the deeper parts, but this passed off quickly.

All the organs contained in the chest had the same smell, which was most predominant in the deeper parts, as for instance, in the posterior edges of the lungs, it was fainter than in the brain, and was speedily dissipated. The left pleura was red, slightly thickened, and had a small adhesion to the lung of that side ; in every other respect the lungs were healthy, as were the heart and larger vessels. These last contained a quantity of black blood, almost entirely fluid, but not quite cold, and having small fatty drops floating on its surface. The mouth was pale, except the roof, and at the posterior part, both which were slightly reddened ; the lining membrane of the fauces and the larynx was also redder than natural, and covered with a reddish mucus, having the smell above spoken of. The œsophagus was red, and contained some fluid which had the appearance of lees of wine, and had also this peculiar odour. The

stomach contained about four ounces of matter, similar to that found in the œsophagus, and a piece of soft, reddish, fibrous texture ; its internal membrane was much injected, and studded with red spots, except toward the pyloric orifice ; the injection of the vessels was clearly observable in the first portions of the small intestines, and became gradually less distinct till it was no longer visible in the descending portion of the colon ; the duodenum and jejunum contained only a reddish mucosity, having a sour smell. A considerable quantity of fluid was found in the ileum, of a less bright colour, and slightly fœtid ; the contents of the large intestines were not liquid, but of the consistency of bouilli, becoming thicker, darker and more fœtid towards the rectum. The liver was healthy, the gall bladder nearly empty, the kidneys were gorged with blood. None of these organs were yet quite cold ; the bladder was distended with limpid urine, its internal membrane was pale, the appendices epiploicæ and mesentery were loaded with fat ; the spinal column was not opened.

The stomach and intestines, with their contents, were given to M. Lassaigne to be analysed. The following was the result :—

The red fluid contained in the stomach was collected with care, and mixed with a quantity of water, which had been used to wash that organ. These two fluids were placed in a glass retort and distilled, care being taken to keep the receiver quite cool. The product of this operation, which about equalled one-fifth of the liquid submitted to experiment, was colourless, had a weak alcoholic flavour, without any smell at all resembling bitter almonds ; its specific gravity was less than that of water, and it reddened the tincture of turnsole, though only in a small degree. Tested with a solution of caustic potass, the persulphate of iron, and the hydrochloric acid, it did not afford any blue colour, as it ought to have done, had it contained any prussic acid.

The residue of the distillation was

then filtered, in order that a greyish flocculent matter, which had coagulated during the operation, and which had all the properties of albumen, might be separated. This, doubtless, arose from some blood which had coloured this fluid in the first instance, since by filtering it after coagulation, it retained only a faint yellowish tint. Some drops of an oily nature floated on the surface, while the liquid was warm, but after standing a few hours they coagulated and looked like fat.

Hydrosulphuric acid, hydrosulphate of potass and ammonia, and the ferruginous hydrocyanate of potass, did not point out the presence of any metallic substances in this liquid, which had been filtered and evaporated at a gentle heat, in a china vessel. The extract, treated with alcohol, threw down a flocculent viscous matter, which, when desiccated, was transparent, and hard as gum, but which became soft and elastic by exposure to a humid air. This matter was not gum, though it had all its physical properties; for, when burnt in a closed tube, it furnished all the products of animal substances, and therefore ought to be considered as a kind of mucus. The evaporated alcoholic solution furnished a yellowish residue, in which there could not be detected any traces of morphine.

From these experiments, it may be concluded—1stly. That the stomach of P. did not contain any matter in which traces of prussic acid could be detected by the re-agents usually employed. 2ndly. That the attempt to discover any metallic substance was also fruitless. 3dly. That the search after morphine, and the poisons analogous to it, was equally futile. 4thly. That the small quantity of alcohol found in the product of distillation, proves that he had drank some spirituous liquor a short time before his death.

Two days after this occurrence, M. Lassaigne and the author gave twelve drops of pure hydrocyanic acid to a young cat, injecting it into the sto-

mach; it immediately became oppressed, its respiration was performed very slowly, and, after a few convulsive movements of the limbs, it died one minute after the ingestion of the poison. A slight vapour was observed to be exhaled from the throat, having the odour of the acid employed, but M. Lassaigne at once decided the nature of it, by exposing a piece of paper, moistened with a solution of caustic potass, to its influence, which became blue when thrown into some acidulated sulphate of iron.

The body was opened on the morrow, and the odour of the acid recognised in the brain, spinal marrow, and thoracic organs; it was less observable in the stomach, which contained nothing but some mucus; the surrounding parts had none of this peculiar smell which completely disappeared from all the parts after they had been exposed for a few minutes to the air; there was not any appreciable lesion.

M. Lassaigne put the stomach, with its contents, into distilled water, and then introduced the whole into a glass retort and distilled, great care being observed to keep the receiver cool. When about one eighth part of this liquor had passed over, it was submitted to experiment. It was transparent, without any smell sufficiently distinct to point out its nature; when tested with potass and the acidulated per-sulphate of iron, it immediately furnished a faint-blue tint, indicating, beyond a doubt, the presence of prussic acid; sulphate of copper, potass and hydrochloric acid likewise detected it in a sensible degree, operating on the first portions of the small intestines; this last test discovered the poison in an unequivocal manner; but the sulphate of iron failed.

Four other experiments were performed in this manner on two dogs and two cats. One of the dogs vomited, and the poison was detected in the matter vomited. The bodies of the three other animals were opened, after a period of time varying from twenty-four to fifty-three hours, and

in all of them the acid was equally perceptible.

From the odour which was exhaled by the thoracic viscera and the brain, it was presumed that the acid might be discovered in them, but the experiment did not answer.

M. Lassaigne concludes from these researches, that it is possible to ascertain the presence of this acid in a distilled aqueous liquid, though the proportion of it should not exceed the ten or twenty thousandth part of its weight of water.—*Bulletin des Sciences Médicales*.

ANIMAL ELECTRICITY.

DR. PERSON read a paper, at the Academy of Sciences, on Animal Electricity, and on a new Instrument for showing momentary electrical currents. The following conclusions are the most important at which the author has arrived:—1stly. It is not necessary that an electrical current should travel throughout a nerve in order to produce muscular contractions; the shock takes place, however small the extent of nerve that is traversed. 2ndly. The existence of electrical currents in the nerves, during life, is a gratuitous assumption, and disproved by experiment. 3dly. The only well-ascertained case of animal electricity is at variance with this hypothesis. 4thly. The shock produced by electrical fish is really caused by electricity. 5thly. The new galvanoscope explains the experiments of Humboldt and Gay Lussac, why, for instance, we receive a shock from carrying a torpedo in the naked hand, when none is felt if it is carried on a metallic plate; and why Davy did not perceive any deviation in the galvanometre of Schweiger, though he received shocks across this instrument which were felt even up to the shoulder. The doctor had endeavoured to show, that the hypothesis of electrical currents in nerves did not accord with experiment, and had

founded this opinion on metals being better conductors than nerves, a fact which he had not demonstrated, believing it to be generally known. Finding, however, that this was disputed, he considered himself obliged to furnish proofs, and with this view related several experiments. The following one appears to answer his object completely.

If a frog is prepared in the usual way for Volta's experiment, by isolating the lumbar plexus and a part of the sciatic nerves, and leaving them attached to the vertebral column, and then a plate of zinc placed on the thigh, electricity will be produced by the action of the moist flesh on the metal; the latter being resinously electrified, while the muscles become vitreously electrified. If the other thigh is made to communicate with the zinc by means of a less oxidizable metal, as copper, the circuit will be formed, and there will be a current from below to above, and from above to below, this current necessarily passing through the nerves; and if at this time they are brought in contact with the platina wire of the galvanometre, the needle will show a deviation according with the course of the current. The electricity must then quit the nerves for the metals; hence we may conclude that metals are better conductors than nerves. It should also be observed, that the metallic wire affords a passage for the electricity five or six thousand times longer. From this and other experiments, Dr. Person is led to conclude—1st. That the nerves do not conduct better than muscles, and that their conductivity is not altered by mechanical disorganization. 2ndly. That the neurilema is incapable of isolating the most feeble current that can be observed in galvanic experiments; so that a current running through a nerve, instead of following its ramifications, passes through the muscles whenever they present a shorter passage.—*Bulletin des Sciences Médicales*.

AUTHORITY OF THE ROYAL COLLEGE OF PHYSICIANS SET AT DEFIANCE.

IN the reign of James I. Dr. Bonham, a graduate of the University of Cambridge, having failed in his examination before the president and censors of the College on two different occasions, determined to try their right over the graduates of the Universities. With this intention, therefore, he declared, "that he had and would practice in despite of the College," claiming exemption from its authority as a graduate of Cambridge. The president and censors sitting in judgment in their own cause, naturally determined against him, and committed him to prison, but he was released in the same month by the judges of the King's Bench, before whom his cause was heard. On this occasion the Lord Chief Justice Coke delivered his opinion, and avoiding the question of exemption on the ground of an University degree, decided that imprisonment could only be inflicted by the College for *mala praxis*; that the penalty for practising only was five pounds per month, and that "any one practising well in London (although he hath not taken any degree in any of the Universities), *shall forfeit nothing, if not that he practice it by the space of a month.*" The College could only recover the fine by an action at law.

Midland Med. and Surg. Rep.

The italics in the above paragraph are ours, and we call the attention of the profession to the above opinion delivered by the celebrated Coke. A man may practise as a physician, and the College cannot prevent him, so that he practise not for a month consecutively, that is he may practise for 27 days, omit the 28th, and commence again on the 29th, and thus set the College at defiance. And it is the same with all our corporate bodies. It is well known that the Royal College of Surgeons cannot hinder even the most ignorant quack

from practising surgery, and who is there that will deny that the Apothecaries' Act cannot be evaded. A medical man, duly qualified, may not practise as an apothecary in any part of England and Wales, unless he pass an examination before the worthies at Apothecaries' Hall in Latin, jalap, rhubarb, and what not; but he may try his skill as a surgeon, write his prescriptions, and send them to his own shop, where he practises as a chemist, in which said domicile he may make up physicians' prescriptions, bleed, cup, and prescribe, *over the counter*, as it is called, and all this may be done by him as a *chemist*, because it would disgrace the old ladies at the Hall to interfere with him, even to protect their beloved members and licentiates. Probably even an *esprit de corps* prevents them, inasmuch as they themselves are the *largest wholesale chemists and druggists* in London, and it would be deemed unprofessional by their brethren in the trade, were they to attempt to put down the medical prescribing chemists.

Who is there will say after this that the laws relating to the profession, do not require revision? We have, we think, successfully shewn that they may readily be *evaded*, and the immense number of quacks, practising as physicians, surgeons, and even apothecaries, shew that they are constantly defied. The College of Physicians will not interfere with the manslaughtering quack, who pretends to cure chest affections, because he rubs in, forsooth, and is therefore a surgeon; and they will not interfere with another quack, because he supplies with medicine, and is therefore an apothecary. The second of these bodies cannot interfere, not having sufficient power, and the third has no time, being too busily engaged in selling pennyworths of rhubarb and magnesia. "There is something rotten in the state of Denmark," and it must be amended.

THE

London Medical & Surgical Journal.*London, Saturday, May 19, 1832.*

ADMONITIONS, characterized by a kind and cordial interest in our prosperity, have been just addressed to us in considerable numbers, with the view of dissuading us from embarking in any personal controversy,—grossly as we have been provoked to hostilities by the wanton and offensive acts of aggression of two weekly cotemporaries. Much as we respect the advice of our correspondents, it is still but justice to ourselves to declare, that even *their* concurrence can add but little to our own deliberate conviction of the impolicy of degrading such a Journal as this into a vehicle for the expression of private resentment. Is not the history of the *Lancet*, with its thousand warnings, before our eyes? Have we forgotten the ignominious penalty which another weekly delinquent has paid for the unseasonable indulgence of his petty malice? Who then would be the bedlamite to hope that he could please, or do any thing else than disgust, the medical public, by adopting so unworthy an example? Our friends may, therefore, repose in the assurance that nothing shall be done by us, with reference to this matter, which may be calculated to disappoint their wishes and just expectations.

But the forbearance upon which we have resolved does not spring from mere policy alone: it is alike dictated by our own feelings—for is

it not natural that we should exult in the compliment which is implied in the combination of such heterogeneous elements as are now united in a ferocious league against our very existence? When we behold such marvels as these taking place on our account—when we see the mortal foes of each other forgetting their sanguinary instincts, suppressing their most powerful antipathies—a “holy alliance,” joining hand in hand in one common cause to procure our destruction; when we contemplate such phenomena as these, we feel that we are justified in placing no moderate estimate on our own importance. There can be no doubt that between the belligerents alluded to, the war would have been permanently maintained—aye, and like an heir-loom, a mutual hatred would have been handed down to the latest generations respectively of both. But the apparition of a new and vigorous rival in the field softened the obduracy of their hearts, and, in the excess of their apprehensions, of which that rival was the source, they forgot their former feuds. Then was it that the prodigals returned, for the first time, to a sense of the obligations of Christian charity; then was it that a simultaneous spirit of forgiveness descended upon their hearts; then was it that they concluded between them an amicable treaty, compared with which the reconciliation of Peachum and Lockitt in the play was a paragon of candour and exalted integrity. “Brother, brother,” exclaimed the first of these veteran knaves, after having attempted to strangle his com-

panion on the spot—"brother, brother, we are both in the wrong. 'Tis our interest; 'tis the interest of the world that we should agree." The sordid impulse of self-interest thus bound this pair of ancient villains together and their unanimity—as the man in the Critic says—was quite wonderful.

STANDARD MEDICAL WORKS OF THE ANCIENTS.

DR. HARVEY ON THE CIRCULATION OF THE BLOOD.

IN a late number of this Journal was an excellent paper on the necessity of studying the medical works of antiquity, which received our full approbation. We are convinced that many modern discoveries will be found in the writings of our learned and classical predecessors; and are of opinion that many of their productions deserve attentive perusal. In accordance with this view we have determined to collate and translate some of those works, and commence with one which will ever reflect glory upon the medical literature of our country; we mean, Dr. Harvey's *Exercitationes on the Motion of the Heart and the Circulation of the Blood*. This production has rendered the most essential and lasting benefits to mankind and to science; and these are acknowledged in every civilized nation on the face of the globe. The republication of this imperishable work, in our vernacular language, cannot fail to be interesting to every ardent admirer of the

microcosm of the human body. Our translation of the original Latin copy will be almost literal, and yet as free as the improved state of our language requires. We shall add a few notes from the latest works on the subject, and prefix a biographical sketch of the illustrious author—of a physician who will live for ever in the hearts of his countrymen, and in the admiration of the scientific world.

In our next we shall commence this undertaking, with the biography of this great benefactor to science and humanity.

DEATH OF BARON CUVIER.

THE scientific world will be concerned to learn, that the illustrious Baron Cuvier died on Sunday night of an attack of paralysis.

Cases of Enteritis—Supposed Small Pox—Symptoms unusual—Peculiarity of the Blood—Deaths of several Persons. By CHARLES VERRAL, Surgeon, Seaford, Sussex.

CHARLES WALLER, a healthy agricultural labourer, aged 25, was seized on Thursday the 19th of January, with severe pain in the head, bowels, and the lower extremities. I saw him on Friday in the afternoon. He then complained of acute pain in the abdomen, which had lasted for some hours, and which seemed to be increasing. It was accompanied by some nausea, by excessive thirst, and by considerable heat of the skin, which had succeeded to coldness and rigor of long duration. The countenance was pale, sunk, and expressive of great suffering; the tongue was much coated, and the breath excessively fetid, resembling the smell of pytalism.

The abdomen was tense and exceedingly tender on pressure. The pain sometimes extended down the thighs, and legs, but still was never removed from the belly, where it was fixed not to a narrow spot, but extended nearly from the umbilicus to the pubes. The pulse was somewhat small, depressed; and not very frequent; indeed during the whole of the attack it was not marked by any very particular character. Some purgatives had been administered which had not operated, but a great part of which had been rejected. I bled him to 16 or 18 ounces, gave him six grains of calomel, and a strong cathartic mixture. At 10 that night I was called to him again. The pain at that time was very considerably increased, so as to writhen the body under extreme agony, and to force from him loud and reiterated groans. He seemed to me to be in the grasp of a most formidable and deadly disease; and as he was at a distance from my house I did not leave him from that time until four on the following afternoon. During that period I again bled him, gave him ten grains more of calomel with repeated doses of colocynth, senna, Epsom salts, powdered jalap, and castor oil. I applied a very large sinapism over the abdomen, and administered, by means of Read's apparatus, two or three injections, the last of which was very large in quantity, and which at length produced the desired effect; and I flattered myself would be the means of removing the impending danger. I then gave him a saline mixture with small doses of antimony, and I ventured to leave a powerful opiate, to be given if the pain did not abate after two or three more evacuations. It was given as directed and produced an hour or two of sleep, and on Sunday morning there appeared to be a decided improvement in the symptoms. The pain though not removed was moderated, the abdomen was less tense and less tender, and a profuse perspiration had broken out; the tongue however continued very foul and the breath excessively foetid. I repeated

his aperient, as he had had no evacuation since the evening; and finding in the afternoon that a most unfavourable change had taken place, that the pain and tenderness had greatly increased, and that the medicine had produced no effect, I threw up another purgative glyster which speedily operated, and I then again ventured to add an opiate to his saline medicine. On Monday morning I found all the bad symptoms greatly aggravated. The pain had returned in all its severity, he had had little or no sleep, and he complained of a great heat about the bowels, which extended up towards the stomach. I again bled him to twelve ounces, applied a blister and gave another dose of calomel to be followed by other purgatives. In the evening he was still worse. The pain was more violent passing through to the back, the sense of heat was increased, the thirst intense, and the abdomen excessively tender. I ventured again to bleed him, and gave another injection, which operated. On Tuesday the symptoms remained unabated. The pain was most distressing, and the sense of heat had extended up the œsophagus to the fauces, and thence to the palate, tongue, lips &c., the whole of which were by the evening so swollen, that for several hours he was incapable of swallowing even a drop of liquid. I applied a blister to the throat and repeated the injection. In the morning he appeared to be sinking. The pulse had lost power, the hands and feet were excessively cold, and he lay in an almost lifeless state, though evidently still sensible and still suffering much pain. As a forlorn hope I now gave him a little spirits in some gruel, which he swallowed with great difficulty, and gave him two or three doses of sulphate of quinine with a few drops of tinct. opii. He died on that evening, having been six days in continual and most acute suffering.

Remarks.—There are two circumstances of a very extraordinary nature connected with the history of this fatal attack, which I have purposely omitted

to describe, partly because I would not interrupt the thread of the foregoing narrative, and partly because I would bring them more distinctly into view, by placing them by themselves.

The blood drawn on Saturday morning was healthy and natural in its appearance; that of Saturday evening was slightly buffed and cupped. On Monday morning it flowed slowly and unwillingly, though from a large orifice; it was dark coloured, and of a thick consistence. I was encouraged, however, to take a tolerable quantity, by seeing the red particles subside rapidly in the tea-cup which I first filled. The same thing occurred also in the evening; but when on the following morning I particularly examined the blood, I found both in the basins and cups the following extraordinary appearances. The crassamentum had sunk and adhered to the bottom of the vessels. The serum was yellowish, *very viscid* and had all the appearance of *very thick* gum water. The coagulable lymph looked like a thin flocculent, elastic pellicle or membrane, spread over the red particles and adhering on all sides to the vessel. On turning it on one side it seemed as if the red particles were contained in a membranous bag, and when that broke beneath their weight, they flowed out entirely uncoagulated, of the consistence of thin treacle, and almost as black as the ink with which I write. I was deterred by these appearances from using the lancet again, notwithstanding the extreme pain, heat, and tenderness, of which he complained on Tuesday.

The second circumstance was an eruption of a very singular character, which I shall have great difficulty in describing. On Saturday I saw a few red specks about the nates. I thought little of them, till on the following day I found them much increased in number. I should scarcely call them pimples, certainly not vesicles. Each distinct speck looked like an effusion of arterial blood beneath

the cuticle, which was in consequence a very little elevated. The specks did not seem to increase in size, but fresh ones continually starting up in the interstices, completely filled or covered the parts, and gave an appearance not very unlike a bold and florid eruption of measles. The parts chiefly affected were the nates, the thighs, the legs, the abdomen, especially where the sinapism had been laid, which looked as red on the Monday as a piece of raw beef. From these parts the eruption appeared to spread, as from a centre or centres, until by degrees it extended over every part of the body, so that by Tuesday evening the chest, face, arms, hands, &c., were completely covered. By degrees also a change took place in their colour. It was as if the effused blood changed its hue from that of the brightest arterial to the darkest venous. By Tuesday the abdomen and the front of the thighs were become absolutely black, or I might say of the very deepest blue; and this change spread so rapidly, that I think, if he had lived another day or two, he would have looked like a negro.

I must now relate a few more circumstances apparently connected with this formidable case. On the evening of Wednesday, the 11th of January, James Waller, the elder brother of my patient, was taken ill at Brighton, where he resided. His complaint was that of most violent and unceasing pain in the bowels, which resisted, during the Thursday and Friday, every attempt to procure evacuations, and which were only moved on Saturday afternoon an hour or two before his death, which took place amidst the most distressing sufferings, after an illness of exactly three days. On the morning of the latter day Charles Waller had visited him, had sat by his bedside for a considerable time, and had kissed him on taking what he rightly considered to be a last farewell. It was on the Thursday following, that he himself was attacked, and with a disease which he, as

well as his mother, considered to be exactly similar to that by which his brother had been carried off. I find, indeed, on enquiry that their sufferings were alike, both in their situation and in their intensity; and that James, as well as Charles, had an eruption of an anomalous character, but which had not spread so universally over the body, and had not excited much attention. *A post mortem examination* here took place, and the bowels were found to be highly inflamed. A young man at Brighton, their intimate friend and companion, had died a few days before, after an illness of forty-eight hours, and it is said under similar sufferings, but of this case I can learn no very authentic particulars.

About ten days after the death of Charles Waller, his infant was taken ill and died in a few days. It appeared at first to be in considerable pain, but it was a puny child which had been prematurely born, and it seemed to sink from mere debility. Here also there was an eruption, which first appeared about the anus, and was considered at first as the consequence of thrush, until it spread over the nates and thighs, assuming an appearance certainly resembling its father's, but which did not become black till after its death. There was here, on the back of one hand, and very far removed from any other part of the eruption, a single vesicle or pustule, not flattened, but suddenly and highly raised above the skin, with certainly some slight central depression, but with little or no inflammation round its base. This child had never been vaccinated.

About the same time Jane Waller, the widow and the mother of the infant, was attacked with strong febrile symptoms, which were succeeded in a day or two by an eruption, totally unlike that of her husband. It appeared first, and was fullest about the face and bosom. It looked at first like a parcel of small pimples, and it was not till about the fifth day, when they suddenly filled

and expanded, some of them forming large round pustules. In this state the idea forced itself upon me that it must be a modified case of small pox after vaccination, though it was unlike any case I had ever before seen. This opinion was strengthened by my seeing an infant, who with its mother had been constantly in the room during the illness of Charles Waller, who had a very decided though a very favourable attack of natural small pox. In a few days after James Waller the father, his son William, and two women, who had been much with the deceased during his illness, were attacked. They had each of them a very few pimples thrown out, which were very thinly scattered; one or two perhaps in the face, two or three on the head amongst the hair, and a few about the chest, abdomen, &c. They never assumed the slightest vesicular or pustular appearance, and bore no proportion to the severity of the attack. The father had formerly had small pox, the others had been vaccinated. He was quite as ill as any of the rest, and indeed had more severe pain in the belly.

The attack with all these began with an extreme coldness of the body, not a mere sense of chilliness or shivering, but a real coldness that lasted for hours. This was not succeeded by much heat, but the patient was left in a state of great depression, which lasted for several days. The countenance was pale, the lips colourless, the tongue coated; there was much headache, giddiness, and pain of the bowels; and the pulses were very languid, and beat for days together not more than 58 in a minute. It is strange that one of these women had had the slight eruption above mentioned, attended at first with slight febrile symptoms, four or five days before this more severe attack came on. She had on the day previous seemed to be tolerably well, and had busied herself in her domestic affairs as usual. She had perhaps twenty or thirty of the pimples scattered about the body. In the night she

was awakened by a feel of coldness, so excessive that she thought herself almost dying. To use her own expression, her very mouth and tongue were cold, and her hands and feet seemed to have no life in them. She had also a very severe pain in the bowels, which was only relieved by the operation of a strong cathartic. It is right to mention, that small pox has been for a long time past very prevalent and very fatal at Brighton; that at the time I was attending Charles Waller, I was visiting daily a patient with *secondary small pox*, in a severe form, in a village near his house; and that an infant child living in an adjoining cottage, who was taken by its mother very frequently into his sick room, during the whole of his illness, did not suffer from small pox, but was vaccinated by me three weeks after his death, and went through the disease in a satisfactory manner.

A medical practitioner in the neighbourhood saw the widow of Charles Waller, and unhesitatingly pronounced it to be small pox, and inferred that it was all small pox, without listening to the history which might have been told him. It is the part of a wise man to enquire, to hesitate, and to doubt until proof be absolutely afforded; to decide without hesitation, and without enquiry, is rather unusual.

Upon an attentive perusal of the above statement, it must, I think, be admitted, that it presents a series of very extraordinary circumstances. The first question is, whether the case of Charles Waller could in any way be connected with small pox after vaccination; and the second is, whether any mode of treatment other than that which was adopted, would have presented a fairer chance of subduing the disease? If the first question be not to be decided in the affirmative, it will perhaps be supposed that I might be the means of introducing the variolous infection amongst them, after visiting my small pox patients; but it will still

be a matter of doubt, whether all the after cases can be looked upon as modified small pox, of which I have myself seen a great deal, but never before any thing similar to these attacks.

TO THE ENGLISH IN PARIS.

STATE OF THE BODY OF THOSE

DESTROYED BY CHOLERA.

Cause of Death thence deduced.—Caution drawn from thence against the present excessive use of Stimulants, on the return of the warmth, or of the re-active stage.

FELLOW COUNTRYMEN, I need no apology for again trespassing upon your attention, but the fact that facilities of observation, yielded to me by the unbounded generosity of M. Velpeau, at *la Pitié* have led me to make some observations that may prove useful as hints to those who are engaged in similar efforts with myself to raise the burden now crushing mortality with its horrid inertia. I have, in my last, stated upon the faith of all the most learned authors and recent observers, that the appearances on death are inconstant, uncertain, and deceptive. I had not had opportunities then of sufficiently minute individual examination to doubt their accuracy, or to induce me to oppose my opinion to theirs. I do it, even now, from the hope of leading research into a new, and, I believe, untrodden path. If I fail, honest men will appreciate my intention and excuse my precipitation. I have now with great care, most minutely examined, or followed, the examination of ten bodies of persons dying in the worst form of, and under the most unfavourable circumstances for cholera. In all of them I have found precisely the same appearances, as fluidity, or demi-fluidity, blackness and limpidity of the whole blood of the body, whether in the arteries or in the veins; extreme lacerability of the muscular substance, of the liver, of the spleen, of the kidneys; injection with the blackish or blueish

blood already mentioned of the minute vessels usually carrying only the white portion of the blood, such as usually indicates inflammation, or its commencement throughout that portion of the arachnoid membrane lining the dura mater of the brain and spinal marrow, throughout the whole of the peritoneum, throughout the whole of the mucous membrane of the throat, œsophagus, or gullet, stomach, and intestinal tube, in the lining membrane of the womb and bladder, and of the pelves or reservoirs of the fluid in the kidneys, in the lining of the trachea or wind pipe, and of its branches in the lungs. There was serum between the pia mater and arachnoid membrane of the brain, and spinal marrow, the veins of these tunics being filled with blue blood, while those of the brain were empty or nearly so; the arteries of the same organ of their natural size, but filled, nay gorged, with blue, or black blood, in place of the vermilion blood they usually contain, while these arteries are, in most other cases of death, found empty, or nearly so. In this last most important, and, I believe, in this disease original observation, I cannot have been mistaken, since I have traced the fact in the presence of English medical men watching the examinations, and who have acknowledged that they had observed the same appearance, but had been led by the blue colour of the blood to consider these vessels hitherto as the veins, having in no case, previously to my observation, traced them from their trunks, but judged of them by their aspect. Add to this, that I have found in all the ten much of the fluid called serum, which ought not to have been the case in health, in the ventricles of the brain, and between the convolutions of the same organ, between the *pia mater*. With these appearances constant in these ten cases, and the only appearances constant in them, *death*, may I think be satisfactorily explained. The inflammation or turgidity, with black blood of the vessels not usually car-

rying the coloured part of that fluid alone, though, I believe, not the immediate cause of the death, would be considered more than adequate, under ordinary circumstances, to induce sufficient exhaustion of the nervous energy to produce death, or the immediate cause of death. This cause I find, or rather conjecture that I find, in the state of the brain, which, from its being contained in a hard and unyielding case, the skull can only contain a certain quantity of circulating blood, or has only a certain space devoted to the circulation of the blood. This space is very much diminished by the sudden effusion of the fluid into the ventricles, and between the convolutions of the brain already mentioned. The space occupied by the arterial part of the circulating blood is not diminished, since we find the arteries natural in size, and full of the blue blood. The veins then are empty, and their sides are pressed against one another, and necessarily retained so pressed against one another by the power of the heart, which beats hard, as may be ascertained from the pulsations of the carotids, even immediately preceding death, and although the pulse at the wrist be imperceptible. This being the case, and the arteries of the brain being thus retained full by the power of the heart pressing upwards the blood, these arteries have no longer power enough to contract by overcoming the power of the heart, or *vis a tergo*; and, therefore, no means of emptying themselves into the closed veins, and into their own capillaries. The blood, already black and unhealthy, being thus impeded in its progress to its destination, the brain is deprived of its natural stimulus, or influence, from the arterial blood, and death is the consequence of its inanition, or of its want of stimulation. If the blood be stopped in its transit to any part of the nervous system, death of the part influenced by that nerve, or rather, coldness, numbness, insensibility, and loss of power, are the conse-

quence. Much more, then, will stagnation of that fluid, so essentially required to re-animate with its periodical and electric touch the nerves in the brain, be productive of cold, of such derangement, as occurs in all the organs, and functions, in fine, of death. I hazard these reasonings, founded upon my observations, in the hope of their leading to the observation of the same facts, if they occur in all cases, to satisfy in some measure the eager, and intense anxiety, and trembling uncertainty, of the public, and to urge that *re-action*, or return of warmth, *may be watched with care*; that *stimulation may not be carried too far*; that *artificial warmth may be duly moderated*; that *all that can, during the stage of re-action, produce a flux of blood to the head, may be sedulously avoided*, and actively counter-stimulated. Should I see reason, in subsequent researches, to change my present opinions, I shall lose no time in informing you. The minute details of my observations, and the scientific comparison of them, I shall make public as soon as I have finished my researches. In the mean time, I must satisfy myself with thus publicly hinting my views.

Your obedient servant, &c.

ALEX. THOMSON, M. B.

Of St. John's Coll. Cambridge; of the University of Edinburgh; and late of the University of London.

43, Rue de Monsieur-le-Prince,
aupres de l'Odeon.
20th April, 1832.

NECESSITY OF THE STUDY OF MENTAL DISEASES.

*To the Editors of the London Medical and
Surgical Journal.*

GENTLEMEN,

THE importance of the class of diseases to which I beg to call the attention of the public and the profession, through the columns of your excellent Journal—a knowledge of which, (I believe in this country, I am sorry to say), is confined to a few indi-

viduals, who monopolize the whole public and private practice of those unfortunate sufferers, labouring under those awful visitations of Providence—an aberration of intellect.

It is not my intention to find fault with those gentlemen (some of whom are noted for their transcendent abilities,) for confining their practice exclusively to mental diseases; but, on the contrary, I conceive that any individual who pays more than ordinary attention to any class of maladies, shall be allowed to possess a better acquaintance with the various symptoms that present themselves, and more able to devise a better method of cure. I could mention the names of many eminent characters to whom this remark applies. However, the names of the late Mr. Pearson, Messrs. Guthrie, Stevenson, Curtis, Brodie, Civiale, and Baron Heurteloup, are conspicuous at the present period.

The fault that I do find with the medical officers of lunatic hospitals is one, which I sincerely trust their own good sense, in viewing the rapid strides that the vast march of human intellect is now making in all parts of the globe, will cause them to effect a grand reform in this important branch of pathology. Let them throw open the doors of the public metropolitan Lunatic Asylums of St. Luke's and Bethlehem to the profession, so that every one of its members, who thirsteth after knowledge, may drink his fill. Surely these gentlemen, and the governors of these and the respective county lunatic asylums, cannot wish that the benefits arising from the treatment of the cases committed to their charge should be hid and obscured from the eye of the profession and the public. Why, let me inquire, are these establishments, which, I believe, are partly supported by large parliamentary grants, and the immense revenues, arising from the estates which have been, from time to time, left by charitable and pious individuals, for the support of the idiotic, imbecile, and insane?

Surely the public ought to gain something in return for the large sums wrung from them in the name of taxes; but in this one instance they gain nothing, for, during my pupilage, I never heard a single lecture on the maladies of the brain, constituting what is termed "insanity," from the learned and talented professor whose pupil I was; and, I believe, none are delivered at the present period. I trust, however, that I am in error in this respect. What I wish to see may be summed up in a few words.

First.—Let pupils be admitted to study these diseases as in other hospitals, but *gratuitously*.

Secondly.—That a course of general lectures on insanity be delivered during each session, illustrated by cases and morbid specimens.

Thirdly.—That clinical lectures, from the most important cases, be given three times a week regularly.

Fourthly.—That a case book be kept by one or more of the resident medical officers, which shall be open for the inspection of the students, who might be allowed to copy any case they may desire.

Fifthly.—That a weekly examination of the pupils, on the subjects of the general and clinical lectures, regularly take place.

Fifthly.—That each pupil be desired to keep notes of the cases under his observation; and that, at the end of each session, prizes to be given by the governors to the pupils who should preserve the best book of cases, and compose the best original essay on one or more species of mania.

Sixthly.—That no pupil have a certificate or testimonial of his abilities or attendance, until he shall have undergone a public examination before public examiners (not their professors), appointed by the governors for that specific purpose.

Lastly.—Let the Councils of the Royal Colleges of Physicians in London, Edinburgh and Dublin, and the Board of Examiners of the Apothecaries' Company, issue a notice that

testimonials of one or more courses of lectures on mental diseases, will be required from all candidates for the respective diplomas and licences to practice.

It is with no small gratification that I find many of my suggestions, contained in the published letter I addressed to Sir Robert Peel, in 1828, "on some of the impediments, abuses, and defects in the present system of medical education,"* have been adopted. Yet, from medical men not understanding the diseases of the mind, there is scarcely a trial of importance, in cases of *de lunatico inquirendo*, but some of the most talented men in other branches of the profession prove their gross ignorance on this subject; and there are many who consider acts of eccentricity to be those of mania, and *vice versa*. This is truly lamentable in a country like Great Britain, which boasts so much of her scientific knowledge. Yet, even poor oppressed, taxed, and maltreated Ireland outshines us in the talent her sons have produced, as abundant examples can testify. At the present period the cant term, *reform*, is in every one's mouth; yet I may conclude with a remark, contained in the letter I have before alluded to, and which is as appropriate now as in 1828:†—"In fact, the present system of medical education in Great Britain is a disgrace to this enlightened age; *it is one that calls loudly for reform*, which, if once accomplished and properly organized, would prove a real blessing to mankind; as it is, it is one of its greatest curses."

I have, Gentlemen, to apologise for the length of this letter; but as

* A copy of which was sent to the higher classes of the profession, and the heads of the examining authorities. Sir Astley Cooper approved of my suggestions, so far as to state to me, in a letter, *that if they were adopted, it would then be an honour to belong to the profession*.

† Since the establishment of the University of London, and the King's College, I am happy to be able to state, that some few improvements have taken place.

publicity may, perhaps, benefit the profession and the public, by reforming the *abuse* (for I can give it no milder name), I respectfully request an early place in your Journal. I have the honour to remain,

Your's obediently,

HY. WM. DEWHURST,

Lecturer on Human and
Comparative Anatomy.

8, Gower Place, London University,
May 1, 1832.

THE CONSISTENCY OF THE MEDICAL
TORY PRESS ON CHOLERA.

To the Editors of the *London Medical and
Surgical Journal*.

GENTLEMEN,

ONE of your highly independent and impartial contemporaries has, for some time past, vented its ire against the medical societies of this metropolis, evidently because the majority of the members embraced the doctrine of non-contagion in cholera. The speakers are stigmatized with the epithets "noisy brawlers,"—"itinerant orators,"—"turbulent and notoriety-loving puffers," and other designations, very becoming in the mouth of a *court* journal—the organ of the medical aristocracy! And yet when the tide of contagion was rolling prosperously along the banks of the great rivers, and the "great channels of human intercourse," none was more noisy in our medical societies than the anonymous editors—none made longer or more turbulent speeches—none went so far in denouncing "fire and ashes" on the heads of all those who even doubted the contagion-creed. When, however, the epidemic sprung up among us, and the contagionists lost ground, these worthies and their clique, deserted their posts, and showered virulent abuse on all who remained to discuss a subject that did not answer the "anticipations" of the macycophant journal. Hear the confession of these Goths, who denounced

fire and ashes upon the heads of the anti-contagionists five months ago: "We had *anticipated* (not *wished*, of course) that when it came to this country the doctrine of contagion would have been extended and confirmed; whereas just the reverse has happened." It must have been no ordinary compunction that wrung such a confession from such a quarter.

But the anti-contagionists in this country are taunted with imitating the conduct of the Parisian hospital surgeons; and the latter are denounced as culpably *precipitate* in declaring, that cholera was not contagious, "after four days experience." Now this sycophant of the "powers that be"—this mouth-piece and lick-spittle of the College, extolled to the skies the first Board of Health and their clan, who had pronounced cholera to be virulently contagious *four months before they had seen the disease at all!* Not a word was said about *their* precipitancy! Oh, no! such independence was not a part of the macycophant 'creed. The Board which ordered cholera houses to be marked with large letters, and laboured to impress on every mind the deadly danger of assisting a neighbour, is the god of the Goth's idolatry; while the surgeons of the Hotel-Dieu, and the anti-contagionists of the country, are traduced as bodies "which have committed themselves by a rash and wrong-headed decision about cholera." Let me ask the Goth and his clique—let me ask the medical profession of the "infected districts," who were the men who laboured night and day in the investigation of cholera in the metropolis? Was it the aristocratical contagionists? or was it the anti-contagionists? Not a man of the Goth's clan ever ventured into the Borough, or visited a cholera hospital; yet this is the censor who talks about "rash decisions," when it is obvious that such "rash and *wrong-headed* decisions" were confined entirely to the contagionists themselves, who preferred statements from the Wolga to the

evidence of their own senses on the Thames.

I maintain that the discussions in our medical societies, during the past session, were of infinite benefit in this capital and throughout the kingdom, by diminishing that terror which is the strongest of all predisposing causes of the epidemic. Had the doctrines and creeds of the high contagionists, the first Board of Health, not been annihilated by a free press and free discussions, London might have been "a charnel house," as the President of the College predicted it would be before the first of May!

One writer is constantly holding up the example of Edinburgh, as a pattern for all other cities, where the conservators are rank contagionists, and codes and precautions are promulgated and enforced in every wynd and alley. The population of Edinburgh is about one hundred thousand, while the population, included within the "bills of mortality" of our Central Board, from Woolwich to Brentford, is at least two millions, or twenty times the population of Edinburgh. How stands the proportion of cholera cases in the two localities? In the London range there have been (11th May) 2,600 seizures, or 1 in 769 souls. In Edinburgh (7th May), there have been 350 seizures, or 1 in every 285 of the population! The proportion of mortality stands thus,—in London have died 1,367 out of 2,597, rather more than one half. In Edinburgh the mortality has been 209 out of 350, as nearly as possible *two thirds*.

Thus, then, the city which has taken such wise and numerous precautions, which has promulgated the doctrine of contagion, and branded every anti-contagionist as a "blockhead;" the city built on rocks and precipices, the least liable to cholera, with all the antecedent preparation, and the sanatory cordons, stands at the very head of the list of this day, (11th May), in the proportion of deaths to recoveries! The epidemic is little more than at its height in Edinburgh, yet it has suffered nearly treble the number of

attacks, in proportion to its population, that London has done! So much for contagion, cholera hospitals, and precautions.

SCRUTATOR.

NON-IDENTITY OF VACCINATION AND
SMALL POX;
THE ONE A PREVENTIVE OF THE OTHER.

*To the Editors of the London Medical and
Surgical Journal.*

GENTLEMEN,

ALLOW me to transmit to you the following case, which I consider highly interesting in two points of view, viz. as showing the power of vaccination in destroying the susceptibility to small pox; and secondly, as I think, proving the non-identity of the two diseases.

Mrs. Cox requested I would vaccinate her child, aged about two years, which I did, on Wednesday, April 19th, she at the same time informed me, that two children had died of small pox at her next door neighbour's, the week preceding. I did not see her again till the following Wednesday, when she called at my house, and requested I would see her child, as it had an eruption upon it, which she thought small pox. I accordingly called, and found that the child had sickened on the preceding Friday, and on Sunday the first, perceived an eruption upon its head and about its body, which had, when I saw it, all the characters of small pox; the vaccine virus had, however, taken effect on one arm, and was arrived at that stage which it usually presents on the eighth day.

As the child was not materially ill, I merely ordered a mild aperient. From this time the vaccine vesicle went on progressing through its natural course, whilst, on the contrary, the eruption of small pox all died away, with the exception of one or two pustules on its head and back, which matured, proving, beyond all doubt, that the eruption was small pox. I

do not conceive that this case requires any comment. It proves, beyond all contradiction, the efficacious effects of vaccination at the latest period, when even the poison of small pox has already contaminated the system, which I conceive it must have done in this case previous to the child's being vaccinated. I would also ask, can the disease be identical with another that neither presents the same kind of eruption, and has at the same time both the power of arresting and preventing the other? It appears to me demonstrably proved to the contrary.

I am, Sir,

Your obedient servant,

JAMES CUMMING.

Tavistock Place.

ACADEMY OF MEDICINE, PARIS,

April 17th, 1832.

PATHOLOGY AND TREATMENT OF CHOLERA.

M. DUPUYTREN proposed that a commission should be appointed to ascertain the best treatment of cholera, and to compose a succinct and substantial instruction or account, so that the physicians of the provinces might have some principles upon which to act.

M. Double opposed this motion, and contended that this was not the time to write or speak, but to employ our time in visiting patients.

M. Marc proposed that the old commission on cholera should be included.

M. Bouillaud considered that the commissions might be united, though he thought a special one was preferable. He could not agree with M. Double, because the grand object was to try and discover the proximate cause of the disease, which invariably remained the same. He also differed from that gentleman, as emetics appeared to him to be dangerous in the great majority of cases.

M. Marc had found *ipécacuanha* excellent in most instances.

M. Dupuytren's proposition was carried.

M. Guéneau considered cholera sthenic and asthenic, and therefore requiring a mixed treatment.

M. Piorry was disposed to believe that the disease was asphyxia; all the patients he had interrogated had declared that they had been concentrated in a small or crowded place, and it had been sufficient to expose them to a free air for their cure. His observations were made at Salpêtrière.

Meeting, April 23d.

Dr. Hood, of Brighton, submitted his paper, published in a late number of this Journal, on the cure of obstinate neuralgia. There were various other communications on cholera.

M. Serres reminded the Academy of the entero-mesenteric fever, which was described about twenty years ago by M. Petit, of the Hotel-Dieu, which was epidemic, whose principal pathological character was enlargement of the Peyerian glands, which, in the cholera, the cryptæ of Brunner, were chiefly affected. The cholera might exist with or without inflammation, with or without vascular injection of the intestinal mucous membranes. The *blue* cholera was unaccompanied by inflammation, and attacked those between fifty and sixty years of age, whose constitutions are injured by privations or excess. The *violaceous* cholera attacked those of twenty or twenty-five years of age, and presented less prostration. The first he proposed to name *psorenterie*, the second *psorenterite*. The first being non-inflammatory, should be treated with stimulants, or opiates, especially in the cold stage, combined with the application of heat to the skin. In the inflammatory cholera the application of leeches to various regions of the abdomen, or anus. A small bleeding at the commencement of the disease, with mucilaginous and antemetic potions, were the best remedies. The action of ice and gaseous water have been most powerful in relieving the vomiting. Lavements of starch and laudanum were productive of great benefit.

April 24th.

The Minister of Public Works, by a pressing letter, invited the Academy to appoint a new commission, who are to execute, with the shortest delay, a succinct and substantial instruction on cholera. This is adopting the recommendation of M. Dupuytren.

The members of this new commission are, M. M. Guéneau de Mussy, Chomel, Husson, Double, Andral fils, Bielt and Bouillaud.

M. Rochoux delivered orally his explanations of cholera:—1, that the blood is black and pitchy: 2, that the lungs are clammy and soft: 3, that the serous membranes, such as the pericardium and pleuræ, are dry: 4, that the liver is filled with a seriform liquid matter; that the disease consists more in changes of the fluids than the solids; that the blood is first affected; and that the cadaverous appearances are not the effect but the primary diseases.

M. Londe refuted these conclusions.

M. Hip. Cloquet stated, that in foreign countries the stomach was seldom examined in autopsies.

M. Castel reported a case cured by simple means.

M. Bouillaud thought the last speaker had not seen cholera at the commencement of the epidemic.

M. Delens said, that patients were not seen in many cases long after the invasion of the disease.

M. Petit congratulated himself upon his success at the Hotel-Dieu.

May 10th.

The members of the Academie met as usual. The subject was cholera. The number of physicians from the provinces was unusually large. It having been suggested, at a former sitting, that *tobacco* proved in Paris a preservative against the cholera, M. Chevalier this evening entered into an elaborate statement to show that this opinion was fallacious. He referred to documents, which proved that no less than twenty-seven me-

chanics, employed in the tobacco-establishments of Paris, fell victims to the cholera.

M. Esquirol made a curious communication respecting the apparent security which madness afforded against the invasion of the prevailing distemper. He said, that not only were the patients in Charenton exempted from it, but there was no case of cholera in any other lunatic asylum.

M. Zouzet gave in a paper, which contained the results of a very interesting analysis which he made of the air breathed by cholera patients. His conclusion was, that during the attack the blood gradually lost its power of exhaling carbonic acid gas, and consequently of absorbing oxygen. These observations were confirmed by those of other eminent physicians.

An epidemic, which bears no relation whatever to cholera in symptoms or in effects, has just broken out at Beauvais (in the line from Calais to Paris). A medical commission, to inquire into its nature, has just left Paris.

The cholera has just made its appearance at Courtray in Belgium. The type which it has assumed is remarkably mild; and, hitherto, the very moderate progress it has made, is limited to the wretched and indigent.

As a curious fact, connected with the current history of cholera, we may mention that in a newspaper, just set up in the capital of the island of Candia, and printed in the Greek language, we find sanitary regulations against the invasion of the disease.

CHELSEA BOTANIC GARDENS.

THE commencement of the lecture season at these Gardens has been marked, we have great pleasure in stating, by an attendance of pupils more numerous and infinitely more orderly and attentive than we have witnessed since the foundation of the lectures. It is quite consoling to ob-

serve that the splendid and well directed liberality of the Apothecaries' Company, begins at last to be adequately recognised by those for whose benefit that liberality was exercised. Our opinion of the general policy of that corporation is already on record; but we should be dead to every feeling of justice and duty—we should be insensible to the display of the most disinterested generosity, were we to withhold from the administration of the above Company, the tribute of applause which is so justly due to them for the existing arrangements at the Chelsea Gardens.

The public in general may not be aware of the very important facilities which have been provided by the Apothecaries' Company for botanical instruction. During the season of vegetation, the curious and valuable gardens, which have been for so many years under the most scientific cultivation, are thrown open every Wednesday to medical pupils. Here the student obtains for less than half the regular price, a descriptive catalogue, in which the account of each plant is distinguished by a number that corresponds with the number marked up near the living plant in the garden, so as to enable him, in the most satisfactory manner, to compare the description with the reality. Two hours are allowed him for this employment; the situation of the garden, the odours of the aromatic plants, and the numerous rural sounds and sights with which it abounds, contributing to render them the two most delightful hours of the week. This is not all—neither the catalogue, nor the garden, can teach general principles, or give a notion of that beautiful order into which the science of botany has been organized. But a lecturer has been appointed to supply this deficiency. The task of expounding the laws and economy of the vegetable kingdom, has, with the greatest propriety, been entrusted to Mr. Wheeler, whose deep acquaintance with the subject, whose methodical arrangement, simple expressions, and clear enunciation, point

him out as well adapted to the peculiar duties which he discharges.*

With such means, or rather with such a treasury of resources at his command, and for which he has not to pay a single penny, who is the medical student that will hesitate to make use of them? We cannot for an instant contemplate the existence of such a being as a pupil in medicine, allowing himself to neglect such an opportunity as this. We are at a greater loss still to understand how a young man can proceed to those Gardens with any possible intention inconsistent with a resolution to profit by his visit. And yet it has happened, we are told in former seasons, that rude and improper conduct has been practiced within their precincts. We are informed that during last season, some of the plants, parts of the garden, and some of the trees, exhibited the marks of wanton violence. Surely it is impossible that medical pupils could be the authors of such excesses. What! to be invited by special favour to receive important instruction in a branch of his profession—to be as it were, the chosen guest of a liberal host, at one of the most delightful banquets, and to avail himself of the opportunity thus afforded him, to commit an outrage of the grossest kind; and this to be done by a medical pupil, is quite incredible! Should, however, so strange an event occur again, it will be the duty of those pupils, who have their own honour and character at stake, to detect and expose all such delinquencies. We pledge ourselves, for our own parts, to assist in every legitimate way for the suppression of all such disorders.

We beg to add, that when any

* We trust that Mr. Wheeler will take it in good part, if we assure him that the instruction which he is so well able to communicate, will not be in the slightest degree impaired by the closeness with which he adheres to the particular subject of his lectures. A long criticism upon a surgical operation, is by no means a welcome episode during that brief weekly hour, which itself is scarcely sufficient for the natural business appointed for it.

subject of great importance, and difficult of being immediately comprehended, occurs in Mr. Wheeler's lectures, we shall endeavour to place the explanation before our readers, so as to give them an opportunity of deliberately considering it. We may mention, for example, the notice in the second lecture, of the great discovery of Dutrochet respecting the rising of the *sap*. This beautiful process, which was admirably though briefly described by Mr. Wheeler, will be amply dwelt on in our next Journal.

Hospital Report.

ST. MARY-LE-BONE DISPENSARY,

Welbeck Street, Cavendish Square.

CASE OF SCARLATINA MALIGNA.— CROUP.—HÆMOPTYSIS.—DEATH.

GEORGE GETHEN, ætat 7, residing in an upper room at 47, James Street, Oxford Street, of a strumous diathesis, admitted under Dr. Bartlett, with symptoms of scarlatina maligna, April 23rd, 1832. On visiting him it was ascertained that the eruption appeared on the breast and limbs about four days, having been preceded by uneasiness, slight fever, and soreness of the throat. For a short time he has been delirious; the tongue continually coated, and the mouth exhaling a fœtid odour.

The eruption has now nearly disappeared, but the throat is severely affected; the odour is very powerful, and, on examination, there is a slough on the palate; the state of the fauces cannot be ascertained, as he is unwilling or unable to open the mouth sufficiently wide. There has been a discharge from the nose, which has now ceased; none whatever from the ears. Tongue coated; the bowels have been much relaxed for a day or two, but the diarrhœa has now stopped; stools black and slimy. No head-ache; pulse small and frequent; is exceedingly weak; deglutition easy.

There is no disease of the kind in the neighbourhood, and the child's mother is totally unable to account for the attack; there is, however, a drain in the lower part of the house, which is in such a state, that the stench can be readily perceived at the upper part.

The child was attacked with measles about ten months since, and was affected two years ago with small pox.

Lotion of the chloride of lime, to be used to the mouth and fauces.

R *Hyd. submur. grij. ter in die sumend.*
Decoct. cinchon c acid. sulph. dil. coch-
lear. med. tertid. horâ sumend.

24th. Is rather better; free from pain; the lotion has removed the fœtor of the breath, and the stools are improved in appearance.

Persistet in usu medicamentorum.

Let him have arrow-root.

25th. Appears to be improving. The slough in the roof of the mouth has separated; stools still dark and slimy; bowels open three or four times a day; pulse small and frequent; not much thirst, and no pain; he expectorates a quantity of matter whenever he coughs; is very restless at night; speaks more freely and easily. Did not take any arrow-root, as he could not swallow it.

Rept. Med. To take beef-tea instead of the arrow-root.

26th. Is apparently easier, and sleeps better; cough very troublesome. Has taken some beef-tea.

Pergat. Mist c. oxym. et syr. papaver, tussi urgente.

27th. Stools still dark, but not so offensive; bowels costive.

R *Sulph. quini. gr. x.*
Syr. simplic. ʒiiss.
Acid. sulph. dil. gtt. x.
Fiat mistura de quâumat coch. min.
quater. de die.
Rep. Med. Ol. ricini nocte sumend.

28th. The castor oil brought away four dark stools, followed by one of a lighter colour. The child appears better, and sleeps tranquilly.—*Pergat.*

30th. The cough is very trouble-

some during the night, and he spits a good deal.

Hyd. submur. gr. iv. nocte.

Ol. ricini mane.

Cont. mist pro tussi, et quininæ.

May 1st. The cough is easier; stools are improved in appearance; complaints of more soreness in the throat.

Rep. Mistura.

2nd. The cough is very troublesome, especially during the night, and he brings up a great deal of dark coloured sputa; complains much of his throat; deglutition very difficult.

Emp. lyttæ faucibus externis. Rep. Mist.

3rd. The blister has relieved the throat, and he is improving. Bowels opened by medicine.—*Pergat.*

4th. All the symptoms are improved, except the deglutition, and consequently the debility. He had some beef-tea last night, but none since, and he cannot be induced to take his medicine.

Habeat med. et dietum in enematis.

5th. Has changed considerably for the worse; nothing passes by the throat, it returns through the nares. The child is very restless; pulse small and frequent; bowels not open since last evening; extremities cold. Croupy symptoms have set in; he coughs with a peculiar noise; appears nearly suffocated with phlegm, which he cannot bring up. Dr. Bartlett visited him, at the desire of the student attending, and ordered—

App. emp. lyttæ faucibus externis.

Capt. ol. ricini si possit.

Hot flannels to the extremities; let him inhale the steam of hot water.

Half-past eight p. m., is a little improved; breathes somewhat easier. Has taken a little aliment.

6th. Is rather better. The inhalation has relieved the breathing, and he brings up the mucus more easily. The croupy cough has ceased in a great measure. The blister did not excite much irritation. The castor oil was taken; and has produced its effect.

Cont. inhal.

7th. Is a great deal improved; cough much relieved.

R Orym. scillæ. ʒvj.

Vin. ipecac. ʒij.

Capt. coch. min. tussi urgente.

Cont. inhal.

8th. The breathing is much freer, and he speaks better. Is free from pain. Is very weak; pulse small and tremulous. Bowels open once. Has had occasion to take only one dose of the cough mixture.

Mist. quinin ter in die sumend.

9th. The cough is more severe and frequent than before, and he brought up a quantity of blood this morning. Pulse nearly imperceptible; bowels not open; deglutition very difficult. For several days past he has been rapidly wasting. It is exceedingly difficult to get him to take any medicine or nourishment, which are again directed to be given in lavements. Dr. Bartlett attended.

Mist. quinin.

Gargar. c. Dec. Querc. et alumin.

Arrow-root.

10th. Died at a quarter to eight this morning.

BOOKS.

Observations on Surgery and Pathology; illustrated by Cases, and by the Treatment of some of the most important Surgical Affections. By W. J. Clement, Surgeon. 8vo. pp. 230. London, 1832, Whitaker; and Shrewsbury, Walton.

This Work evinces much judgment and faithful observation.—The Glasgow Medical Journal for May.

* * * The American Journal of the Medical Sciences, for January and April, have not been received by us, nor in London. The Number for August, 1831, has been sent instead.

NOTICES TO CORRESPONDENTS.

Dr. McAdams' interesting paper on Cholera, dated March 7th, has reached us May 11th. Where was it detained? It is now devoid of interest. Was it cushioned by a London contagionist?

A Georgian.—The Lectures alluded to will be acceptable.

Delta.—The article in Defence the Press will be inserted as early as possible.

Zeta.—We shall be happy to hear from our esteemed correspondent on the subject; but great care must be taken not to entangle any one in the wide-spread meshes of the law of libel.

London Medical and Surgical Journal.

No. 17.

SATURDAY, MAY 26, 1832.

VOL. I.

Royal College of Surgeons.

LECTURES

ON THE

ANATOMY AND DISEASES OF THE EYE,

DELIVERED BY

G. J. GUTHRIE, Esq., F.R.S., V.P.R.C.S.

Lecture the Fifteenth.

ARTHRITIC IRITIS.

MR. PRESIDENT,

GOUTY, or, as it is termed by continental writers, arthritic iritis, is by no means a common complaint of this country, although diseases in some respects resembling the description given of it are very frequently met with. If I were disposed to hazard an ill-natured remark, I should say, that the division of diseases of the eye into so many kinds, is occasionally detrimental, and that it has led to the doubt expressed of arthritic iritis being commonly seen in this country, not because the complaint is not often seen in its advanced stages, but because it is not recognized as an iritis in its previous states; and I believe that it has almost as little real pretension to be called a pure iritis as the serofulous inflammation of the iris to which I last alluded. How far the people of Austria and Hungary, who live on bad food and drink their acid wines, may have a pure gouty iritis, I have not had an opportunity of observing; but in this country, when gouty people have an inflammation of the iris, it is usually only a part of a general disease affecting the internal structures of the eye.

The eye is very rarely attacked by gouty inflammation when the persons subjected to it have regular paroxysms. It is only when the fits become irregular or wandering, that the eye is apt to suffer; the disease may then take place without any previous affection of the eye, which more often occurs

when the attack is severe, in which case the disease subsides; or even disappears altogether from the part originally affected. When once the eye has been affected, it is very liable to a relapse, and from very trifling causes. In other cases, the external parts of the eye have been affected by inflammation from common causes, and then the more internal gouty inflammation supervenes. The symptoms are those of active or of passive and chronic disease; in this country they are generally of the latter kind. In all cases the symptoms resemble those of rheumatic iritis, and in the early stages the history of the patient will lead us to decide on the nature of the complaint. It is only in the later stages that the true characters of the arthritic iritis of the Germans appear, and then they are signs of disorganization, not of inflammation. For instance, it is said that the purple colour, with the tortuous, dilated, and varicose state of the vessels coming out through the sclerotic coat, a little distance from the edge of the cornea, is characteristic of arthritic iritis, and I have no doubt of its being so in Germany; but as these signs appear in this country in persons who have never had any symptoms of gout whatever, nor have any after vision has been lost, either in the eye or elsewhere, I believe that they are only signs of a disorganizing alteration of structure going on in the part, and which I do not believe to be essentially gouty. The sclerotic coat after this loses its natural healthy appearance, and assumes a dirty-greyish or bluish hue, which is also considered to be essentially arthritic, but which takes place in every disease of the choroid coat, in which its vessels become varicose and diseased, being a common and necessary effect of such derangement without any gouty tendency existing in the habit.

If the inflammation be in an active degree, and more particularly attacks the iris, the pupil will be contracted, whether the patient be of a meagre and irritable habit, or whether he be of lax fibre and endowed with a less degree of sensibility, the change in the pupil

depending more on the nature and seat of the inflammation than on the temperament of the patient. When the inflammation, whether it be acute or subacute, attacks the internal parts of the eye more generally, then the pupil will be dilated, the eye will be amaurotic, and the danger of total loss of vision more imminent. If the pupil is contracted, the results will be usually the same as in rheumatic iritis, and if the pupil becomes dilated from the causes assigned, the disease in a short time will become *glaucoma*, a complaint which, in Great Britain, takes the place of the arthritic iritis of continental writers, but occurring in a more gradual, although in not a less painful, manner. As the pupil enlarges it becomes irregular, fixed, and convex; the sight gradually diminishes with the continuance of the excruciating circumorbital pain, until it is totally lost. This pain is at first preceded by a peculiar creeping sensation on the cheek, as if an insect was crawling on it, and is followed by a flow of hot tears. The white, fatty secretion, which is supposed to be a characteristic sign of arthritic inflammation, I have seen in many cases, having no such tendency, although it is not denied that it occurs more frequently on them. The cause usually assigned for this appearance, viz., the more frequent opening and shutting of the eyelids, I do not rely upon as correct.

This complaint rarely attacks persons of either sex until after the middle period of life, or about forty years of age. It is very intractable, often lasts a long time, is rarely completely cured, and the eye is always prone to a relapse; so that at last a chronic state of disease is established, which leads to disorganization. In the first attack of this disease blood-letting should be had recourse to, and to as great an extent as the state of the patient will fairly admit, after due consideration, the subjects of this disease being generally persons of full, but yet weakly habits. In subsequent attacks, cupping behind the ears, but never on the temples, or leeches answer best; and then the blood when taken should be in moderation. I rely on colchicum and turpentine with opium, always in preference to mercury, which I never give until the other two have failed, or have ceased to do ultimate good. Opium should be applied frequently and largely to the eyebrow and forehead. A hot infusion of tobacco as a wash sometimes gives relief; but dry warmth seems to agree best. Wherever gout has appeared in any other part, and has subsided, sinapisms should be applied to the feet to encourage its return. Blisters, iron, and quinine, do good in the latter stages when the disease is chronic, and has resisted the more powerful remedies alluded to; but the remedy, which should never be omitted, nor given up by a person once affected by the disease, is an issue in the arm. I have not time to express my opinion of the value

of a permanent drain in many diseases affecting persons after the middle period of life; but I may say, that in many of them it is really invaluable, doing more than all others put together. The diet, exercise, time for sleep, &c. of the patient, should be strictly regulated in the most extensive and rigid sense of the words. The eyes should be used as little as possible, and changes of temperature should be avoided. A lotion of ammonia and æther should be daily used to the forehead and temples, and frequently repeated if any uneasy sensation is experienced. Stimulants to the eye must be used with great caution.

I am now desirous, in bringing this my last lecture to a conclusion, to occupy the small remaining portion of time to the best advantage, as far as relates to the junior part of my audience; I shall, therefore, with this view make some remarks on the examination of the eyes of persons who complain of defective vision. It may be taken as a general rule or guide, subject of course, like every thing else, to exceptions, that in young adult persons defective sight is the consequence of inflammation of some part or other. In elderly persons it is more often the consequence of opacity of some of the transparent structures, or of amaurosis. In young persons, and particularly those who use their eyes much, as tailors, the defect is commonly caused by low inflammation of the tunica conjunctiva; it is not always present, but returns at times, particularly after using the eyes; and the redness of the conjunctiva is sufficiently marked to demonstrate the nature of the disease, which will be cured by moderate depletion by leeches, by mild stimulants, by regular diet and exercise, and by refraining from work. When no appearances can be observed in the external structures, and little or none in the internal ones, as far as can be perceived, the diminution of sight will generally have been very rapid, and accompanied by head-aches and some uneasy sensations in the eye, although little or no zone of redness can be observed, nor any alteration in the pupil. The retina is, I believe, affected in these cases, and gentle emetics and purgatives, followed by mercury, will usually effect a cure. The last two cases of this nature I have had at the hospital, were remarkable for the great deprivation of sight, and the rapidity of its recovery when the mercury began to take effect.

The commencement of a conical cornea is sometimes mistaken for a disease of the retina.

On examining the eyes of middle aged persons, they should in the first instance be placed before the light, when the freedom of the conjunctiva from inflammation, the soundness of the sclerótica, and the transparency of the cornea, may at one view be distinctly seen, all of them being points of great importance; the eye of the surgeon naturally

rests in the next place on the iris and pupil, the blackness of which is naturally diminished as persons advance in life, not from disease, but from the deficient secretion of the pigmentum nigrum, which gives to the pupil a greyish colour, which may be mistaken for commencing opacity. The flatness of the iris, or rather its want of convexity, is a point deserving of attention, whilst the size and motion of the pupil are observed. When a strong light falls on both eyes, the pupils of each usually contract or are diminished to the same extent, and this they will often do when the sight of one eye is lost, in consequence of the sympathy which exists between the iris of one eye and that of the other. When one eye is covered, and the other or sound one is exposed to the same degree of light, the pupil gradually enlarges to a size something greater than it does when both eyes are exposed to the same light, although the other should be deprived of sight. If the unsound eye be now examined in a similar manner, the pupil gradually enlarges to a much greater extent, so as to leave no doubt of the existence of a derangement, which would not have been observed if both eyes were submitted to the same degree of light at the same time. This leads to further investigation, and the defect in the retina soon becomes obvious, and the patient may perhaps learn, for the first time, that he has lost the sight of one eye. In these cases, however, the pupil of the unsound eye is usually larger in a moderate light than the other. The motions of the iris are generally unimpaired under a strong light when it falls on both eyes, and therefore the necessity for examining them separately, in order to ascertain which is defective, and that will be shewn by the want of vivacity in the contraction of the pupil, and by the defect of sight. The normal state of the iris must now be considered, and the patient strictly questioned as to any pain he may have or may have had in the eye, and over the brow, in the course of the fifth pair of nerves, and it is always as pleasing to learn that the patient has never had pain of this description, as it is unsatisfactory to hear that he has suffered materially from it, in which case little is to be expected from treatment. If there be a doubt as to the existence of opacity of the lens, the belladonna should be applied to the brow at night, and the patient should be examined in the morning when the pupil is dilated, and the surface of the lens and capsule is exposed. If the opacity is well marked, the nature of the cataract may be estimated by observing what is called the shade of the iris upon it, or the distance between the capsule of the lens and the back part of the iris or uvea; this is done by letting the light fall sideways on the eye, when the shadow of the iris will be distinctly observed, and the distance between the parts correctly estimated. A small lens being usually a hard one, and the distance between

the parts as great as the parts will allow, the iris being plane on its surface and its motions perfect. A large lens or cataract is usually a soft one, the distance between it and the uvea is scarcely perceptible, and in some cases the iris is even pushed a little forwards by the enlargement of the lens; the pupil in such a case is larger than natural, the black edge of the uvea projects a little beyond the blue iris, forming a ring of black, which is very well marked and seen when the cataract is of a white colour. The motions of the iris or pupil are very slow or sluggish, but this is caused by the pressure of the lens from behind, and does not imply disease of the retina. In fair cases of cataract, the patient can to the last see the shade of his fingers when they are passed before his eyes, and between them in a strong light. When he cannot distinguish light from darkness, the case is hopeless. If I were to enter further into these subjects I might give as many more lectures as I have done, but my hour is come, and I have only to thank you, Sir, and those Gentlemen who have attended, for the kindness and attention with which I have been received.

MR. HETLING'S
SURGICAL LECTURES
AT THE
BRISTOL INFIRMARY.

Session 1831-32.

INTRODUCTORY LECTURE.

(Continued from page 459.)

SURGERY is usually divided into its *principles and practice*. It has been well remarked by a late writer, that "the person who first introduces a principle as a principle, is as much the discoverer of that principle as Franklin of electricity, or Jenner of vaccination. The facts were known before them, but in an insulated and unproductive form; they systematized them, and thus communicated to us a new power."

It is the office of science first to obtain a knowledge of individual facts, and afterwards to reduce those facts to general principles. In proportion as the generalization is more complete, and as the number of general principles is diminished, so is science rendered more perfect; for it is on the base of principle only that the acts of the surgeon are uniformly useful, or uniformly safe. Practice, in some instances, leads to theory and principle. If a person of an inquiring mind, for instance, makes a most important discovery in practice, he is not satisfied till he is master of the principle in which it lies; having once obtained that, he acts upon it throughout life.

Every art in Europe has its principles, by which we are enabled to account for old facts, and establish new ones; the same holds good in surgery. Effects strike us most forcibly, even whilst the cause is unknown; but as the effects are only the consequence of the cause, it should, if possible, be discovered, which, with all our penetration, we frequently attempt in vain. We generally know the cause of inflammation and its consequences. In the bite of a mad dog, we know that by removing the bitten part the disease is removed or prevented.

The principles of surgery cannot be said to be unknown, yet they are so imperfectly diffused, and the practice consequently so undetermined, that we find every ingenious surgeon, author, and lecturer, varying both according to his fancy and opinion. "Whether you amputate a limb, or whether you try to save it, there are authorities against you on either side. Allow me to say to you, that questions of practice should be decided, not by authorities, so termed, for these are the opinions of men, and frequently of inexperienced men, and we know too well how strangely an author's opinion will grow up in him, distorted by a thousand hypothesis. But they should be determined by reason and experience, which is the true basis of opinion; for after all authorities are laid down before us, still the true spirit and reason of our rules remain in the nature of the thing itself; if we can once find out that reason, it must serve as the principle of our practice; and though opinions, authorities, and names, might put us wrong, that will never deceive us."

In surgery, as in other sciences, we should begin with first principles, and form a general outline, before we descend to the minutiae. To a general outline and to general principles, then, should the student be at first confined; a general outline the mind can easily embrace, and the general principles and practice of surgery it can easily remember and record by the taking of short notes. When fully acquainted with the elementary knowledge of our subject, we may afterwards proceed to view its connections, and enter into a complete detail of the whole; this will lead us to discern the symmetry of the parts, and prevent our taking an abrupt, irregular, or insulated position, so obviously detrimental to a regular, scientific, and an accomplished education. As we proceed in our studies, whatever difficulties may arise, or new matter present itself, a general principle will afford us a rallying point; and we shall find ourselves possessed of premises from which we can argue and explain. To take a young person from school, or one who is just entering the profession, whose mind has been long occupied with other pursuits (which is the light in which I ought to view my audience), and to toss him headlong into miscellaneous and unconnected points, would

only embarrass and distract his attention, and weary the powers of the mind with almost useless exertions, besides violating the best approved rules of education. Much labour may be prevented by method, and much disgust by a well-arranged introduction to any science, more particularly in ours, which is so overcharged with hypothesis and bad complicated practice. My principal aim is to inculcate the best and most approved principles of our art, and to lay a solid foundation, on which hereafter you may be enabled to build all the knowledge to be obtained from experience, and from works of the greatest erudition and most profound science.

The rapid advancement made in the pathology and treatment of surgical diseases, demands a perpetual revision and correction of this department of the healing art, both in principle and practice; hence it is that we have successive improved editions in our works on surgery, by which authors endeavour to keep pace with the advance of science, whilst others have fallen into disuse. On this single term "sound and rational improvement," as on a great principle, we base all our opinions and views. Improvement, gradual and secure, but constant improvement, is the vital principle of the art and science of surgery.

As the object of these lectures is intended to illustrate the principles of surgery, by reference to cases in this hospital, I shall here introduce a few observations with respect to hospital practice in general. Where else can these be learnt but at the bed-side of the patient; and where else can a number of young men, who cannot be admitted into the private practice of families, acquire this necessary and important information, but in public hospitals? The student here may see, hear, and learn for himself. Here he can freely observe the hue of the complexion, the feel of the skin, the lustre or the languor of the eye, the throbbing of the pulse, the state of respiration, the tone and the tremor of the voice, the confidence of hope, or the despondence of fear, expressed in the countenance. Here the whole range of disease, accident, and operative surgery, is open to his view: all and each of these convey important and necessary information, and which baffle the most accurate description of the pen. In fact the study of diseases, and the practice of medicine and surgery, cannot either be learnt or taught to a class of young men but in public hospitals. Hospital attendance, therefore, constitutes the most important part of medical study. In truth, where else but in this great book of disease can the student learn his profession. He deceives himself if he expects that knowledge comes by intuition. He must in his hospital attendance observe, investigate, and note for himself.

We see surgical pupils eager every day to witness the performance of some capital operation. This is very natural; but it is to

be feared that with many the zeal for surgery ends in the passion for what is new and striking, while the more really important cases of every-day occurrence are passed by unheeded. Allow me, however, to observe, that more talent is required to heal an old ulcer, than in the performing most of our operations. So it is in physic: young men are too apt to regard as uninteresting those chronic cases which are marked by no prominent features, and over which remedies exert no immediate or striking effects; yet the treatment of such diseases constitute the true test of professional skill. Young men, too, engaged in the same studies, mutually assist each other; emulation, which warms and engages the feelings on the side of whatever is excellent, useful, or profitable, cannot be excited without rivals; and, without emulation in the scholar, instruction will proceed but at a languid rate, improvement will creep but slowly on, and excellence is never attained.

You are aware that it has been long the custom to connect medical schools with the great hospitals in London, by which the student has the advantage of confirming or correcting at the bed-side of the patient, the impressions he has received in the lecture-room. It is this arrangement which has given to London its great celebrity as a practical school of medicine and surgery, and which enables the student to draw from the fountain head, the stores of knowledge accumulated by the labours and the talents of the Hunters, and Baillie, and Cline, and Cooper, Bell, and Abernethy. Most of these great men have passed away, and the rest have ceased to teach, but they have found worthy successors, and perhaps the metropolis could never boast of a greater number of distinguished men than at the present time.

It is therefore with perfect sincerity, and I hope from a candid and enlarged view of the subject, that I congratulate you, gentlemen, and the public at large, on the first step towards the formation of a regular course of surgical lectures in this hospital, which I trust soon to see extended to the other departments of our profession, thereby establishing a complete medical school in this city, which, if properly supported and encouraged, cannot fail to afford you the best means of obtaining a medical education, which will considerably abridge your future labours in London, and will also enable you to pass through your various examinations with confidence and success.

It will not, I trust, be considered out of place, again to recount the advantages which this city possesses for a great medical establishment. With a population equal to that of most of the capitals of Europe, with a large and well-regulated hospital, the student here may practically learn the nature of most of the various diseases which affect man in every part of the globe.

THE
ANATOMICAL EXERCITATIONS
OF
WILLIAM HARVEY, M.D.

Professor of Anatomy and Surgery at the Royal College of Physicians; Physician to His Majesty King Charles I., and to St. Bartholomew's Hospital, &c. &c.

ON THE
MOTION OF THE HEART AND CIRCULATION OF THE BLOOD.

TRANSLATED FROM THE ORIGINAL LATIN,
BY M. RYAN, M.D.

To which is prefixed,
A BIOGRAPHICAL SKETCH OF THE
ILLUSTRIOUS AUTHOR.

WILLIAM HARVEY, a man who, by his brilliant discovery, formed a new era in the science of anatomy and medicine, was born the 1st April, 1578, at Folkstone, in Kent. He was the eldest of nine children. His brothers became merchants, but he chose rather to follow the science of medicine, in which, if he did not obtain a princely fortune, he found that which is more prized by great minds—glory and immortality. After having passed six years at Cambridge, Harvey visited France and Germany, and thence he went to Padua, where he studied under the celebrated Fabricius, of Aquapendente. At the end of five years he took his doctor's degree in the twenty-fourth year of his age, and then returning to England, again graduated at Cambridge. In 1603, he settled in London; and in 1604, was admitted candidate of the Royal College of Physicians, and was elected a fellow in 1607. In the year 1608, he was elected physician to St. Bartholomew's Hospital. In 1615, when he was in his 37th year, he was appointed professor of anatomy and surgery, at the Royal College of Physicians. The original manuscript of his lectures is preserved in the British Museum; and his curious anatomical preparations were presented, about eight years ago, to the Royal College of Physicians, by the Earl of Winchelsea, the direct descendant of Lord Chancellor Nottingham, who married the niece of the illustrious subject of this memoir. These curious preparations consist of six tables, or boards, on which are spread the blood-vessels and nerves, carefully dissected out of the body, and in one of them the semilunar valves of the aorta are distinctly seen.

Doubts are entertained of the date of the first promulgation of his invaluable doctrine of the circulation; but the index of his manuscript in the British Museum, contains the

propositions upon which his opinions were founded, and refers them to April, 1616. He withheld his discovery from the world for twelve years, during which he reiterated his experiments both privately and before the College of Physicians, answered every doubt and objection urged by that body, and advanced every proof and argument which can be offered at this day. After the most scrutinising and repeated examinations of his doctrine, the president and censors gave their solemn sanction to its publication.

In the year 1628, his imperishable work, entitled "*Guilielmi Harvei, Doct. et Profes. Regii, Exercitationes Anatomice, de Motu Cordis et Sanguinis Circulatione*," dedicated to Charles I., was published at Frankfort; and this place was selected in consequence of its celebrated fairs, by means of which books printed there were rapidly circulated throughout Europe. In a short time afterwards he encountered the most unjust opposition, some accusing him of innovation, others of reviving former opinions, which compelled him to publish two other *Exercitationes* in refutation of his opponents. So great was the envy of his rivals and the clamour raised against him, that his practice declined very considerably for some short time; but it soon became more extensive than ever.

Some time before the publication of his inestimable work, his reputation was so great that he was appointed physician extraordinary to King James I., and in 1632, he received a further mark of royal favour, in being elected physician to Charles I. This unfortunate monarch was a zealous patron of the arts and sciences, and, with the noblest persons of his court, witnessed Harvey's experiments. The interest the King took in the success of his anatomical researches was of great service to him, and his Majesty's favourite diversion of stag-hunting furnished him with ample opportunities of dissecting a vast number of animals of that species in the gravid state.

About this time, he accompanied the Lord High Marshal of England, the Earl of Arundel and Surrey, as his physician, to Germany. It is recorded, by one of his Excellency's suite, that "Harvey, in his journey to Vienna, would be making excursions into the woods, making observations on strange trees and plants, earths, &c., and sometimes ran the danger of being lost." In the year 1633, he accompanied the King to Scotland, and has left an excellent description of the Bas Rock, and adjoining scenery, near the Firth of Forth. In 1635, he was commanded by the King to ascertain the autopsy of that extraordinary instance of longevity, Thomas Parr, who died at the age of 153, the particulars of whose history, fatal disease, and necrotomy, appeared in No. IX. of this Journal.

At the commencement of the Rebellion, his lodgings at Whitehall were plundered, and his papers, containing his curious observa-

tions on the Dissections of Frogs, Toads, and other Animals, were carried off. The loss of these he never ceased to lament, saying—"That for love or money he could never retrieve nor obtain them."

He followed the King to Oxford, where he received the Doctor's degree on the 7th Dec., 1642; and in 1645, was appointed, by the King's mandate, warden, or president, of Merton College. Here he visited Dr. Bathurst, B.D. who had a hen to hatch eggs in his chambers, and these they opened daily to see the progress of incubation. This was a favourite pursuit with Harvey, and forms the subject of another curious and ingenious work of his, which will be noticed immediately. He was obliged to return to London in 1646, on the surrender of Oxford. In 1649, he withdrew from the world, and led a most retired life at Combe, in Surrey. There he had good air and a pleasant prospect. In the summer he ordered caves to be made in the earth, in which he meditated. In 1657, he delivered his second work to the world, entitled—"Exercitationes de Generatione Animalium: Quibus accedunt quedam de Partu de Membranis ac humores Uteri et de Conceptione. Auctore Gulielmo Harveo, in Collegio Medicorum Londinensium Anatomies et Chirurgicæ Professore." This work was published in 1651, and contains seventy *Exercitationes*; those on reproduction leading to the doctrine of the universal prevalence of oval generation. His chief illustrations are the hen, chick, and deer. He was the first who proved the origin of the chick from the *cicatricula*, and perceived the punctum saliens to be the heart. He accurately described the successive formation of the several parts, so far as the eye could enable him, and corrected many ancient errors. He held that the formation of viviparous animals is not different from that of birds. He gives an excellent description of parturition and practised obstetrics, for he describes several instrumental cases of labour in which he operated, and puerperal diseases which he attended. This fact must be unknown to some of our recent writers on, and professors of, midwifery, who assert that Jules Clement, the surgeon who attended the mistress of Louis XIV. in 1666, was the first obstetrician. But Harvey was a quarter of a century before him. In 1652, he proposed to the College to build them a library and museum, which proposal was communicated by Dr. Prujean, the president, and readily agreed to, which induced the College to erect a statue of white marble to Harvey, in the robes of a doctor, to be placed in their Hall, with a Latin inscription, alluding to his two great works, by which he had rendered himself immortal.

The building was finished in 1653, when its illustrious founder invited his colleagues to a splendid entertainment, and the doors of the museum being thrown open, Harvey, in the most benevolent manner, wished all pros-

perity to the republic of medicine, and presented at once the mansion and all its valuable contents, books, preparations, surgical instruments, &c. to the College. He then laid down the office of professor of anatomy and surgery; and was succeeded by the celebrated Glisson.

In 1654, he was offered the presidency, which he declined on account of his age and infirmities. He instituted an anniversary feast in 1656, and at the first meeting presented his paternal estate of 56l. per ann. in perpetuity to the college. The purposes of this donation were the institution of an annual feast, at which a Latin oration should be delivered, in commemoration of the benefactors of the College, a gratuity for the orator, and a provision for the keeper of his library and museum.

He now drew near the close of his splendid career, and, according to many of his biographers, especially Dr. Laurence, yielded his spirit to his Maker, in June 1658. It appears, however, by a record of the College, that the fellows were summoned to meet in their robes on the 26th June, 1657, to attend his funeral. His death is also recorded by Hamey, in his curious manuscript, in these words:

"Gulielmi Harvei, fortunatissimi. anatomici, desiit sanguis moveri, tertio Idus Junii 57, cujus alioqui perennem motum, in omnibus verissime asserverat.

"Sepultus, 26 Junii, 1657, quo die inaugurates est Cromwellus."

According to these accounts, more than three weeks elapsed between the time of his death and funeral; but as his remains were attended by the College to a considerable distance from the city, it is probable that the preparations for his interment were delayed, as they were upon a scale of unusual magnificence.

Posthumous eulogy was never bestowed upon a more worthy individual. His great discovery was more important to mankind than perhaps any made before. It placed the practice of medicine on a sure and certain basis, and will be revered as long as medicine is cultivated. As a private individual, he was distinguished for all the virtues that adorn the human character. He was benevolent, charitable, humane, dignified, candid, cheerful, and upright, the *mens conscia recti* was always his consolation; he was revered by his relations, highly esteemed by his profession, and the public. In all the violent and outrageous attacks made upon him, he calmly persevered in "the even tenor of his way," and replied to his assailants as a Christian and a Philosopher. In him were united dignity and condescension. He knew that truth was great, and would prevail. In replying to his antagonists, he invariably employed temperate language, refuting their charges while exposing and confuting their arguments and disproving their statements,

he gave them due praise for any ingenuity or merit to which they are entitled.

Every member of the profession will naturally wish to learn the success of this great man as a practical physician. Notwithstanding all opposition, he died worth 20,000l. This was not a large sum, considering that he was court physician; but when we consider his indefatigable attention to the investigation of the mysterious subjects which chiefly absorbed his attention, the inference is natural that he must have greatly neglected those wordly essentials in a medical practitioner which captivate the bulk of mankind. A philosopher of his caste could pay little attention to the study of mannerism, and most probably neglected the investigation of ordinary diseases. It is also on record, that his prescriptions, or *bills*, as they were termed, were so complicated, that it was difficult to understand them. But it is useless to dwell upon his success. He gained an inestimable renown, which will be acknowledged as long as this world will continue. In 1766, the College of Physicians published a quarto edition of his works, to which a Latin life of the author is prefixed by Dr. Laurence. It is a pleasing reflection to contemplate the vast contributions our countrymen have made to the medical and collateral sciences. What a bright galaxy of anatomists, physiologists, physicians, surgeons, obstetricians, and chemists, does our history exhibit! Men who have conferred lasting and invaluable blessings upon society. It is a happy coincidence that a Harvey discovered the functions of the circulatory, and a Bell of the nervous system; while Hunter, Black, Priestley, Monro, Cullen, Pott, Mason Good, Abernethy, Humphrey Davy, and Watt, have, by their discoveries, completely remodelled many of the sciences, and placed them upon solid foundations.

Although Harvey was the real discoverer of the circulation of the blood, yet traces of his theory may be found in some of the older writers, as Servetus, Columbus, and Cesalpinus allude somewhat to it, and Harvey's teacher of anatomy, Fabricius of Acquapendente, among his other studies, paid great attention to the valves of the veins. To Harvey however belongs the glory of having assembled these scattered ideas, and of giving life and motion to what was previously a senseless, inanimate mass: thus far, even those who are desirous of detracting at least a portion of well deserved fame from him, are compelled to admit; but in order to prove that there are facts, that Harvey gleaned a little knowledge from the older writers, it is not sufficient that traces are found in their works, actual demonstration must be given that he had studied these productions. It is very probable that the attention of Fabricius being drawn to the valves of the veins, brought the subject of the circulation more immediately within the notice of this great man; yet a mere knowledge, gathered from another person, that such valves did exist, is not

sufficient to overthrow, or in the least disturb, his right to the honour of having discovered the circulation. Besides the long period of time which he passed in performing his experiments, clearly evidence that the idea was original with him, and that it required a great mass of information to convince himself of the validity of his opinions. How admirably do the prudence and caution of Harvey, in announcing his astonishing discovery, contrast with the eagerness with which many individuals obtrude their crude notions upon mankind.

CLINICAL OBSERVATIONS

ON THE

EXHIBITION OF OPIUM IN LARGE DOSES,

IN CERTAIN CASES OF DISEASE.

BY WILLIAM STOKES, M.D., &c.

One of the Physicians to the Meath Hospital.

(From the *Dublin Journal of Medical and Chemical Science*, May.)

It may appear unnecessary, in the present state of medical science, to bring the importance of opium, as a remedial agent, before the notice of the profession. In these countries, indeed, its value has long been appreciated; and the writings of Drs. Hamilton of Lynn-Regis, and Armstrong of London, have established its value in many cases of inflammatory disease, when it was combined with other remedies. But practitioners do not, as it appears to me, sufficiently estimate the powers of opium, in subduing inflammatory action, and it is principally with a view to establish this point, that the following observations are made.

The first form of disease in which the use of opium, appears peculiarly advantageous, may be stated to be that of *peritonitis occurring under circumstances where blood-letting cannot be employed*. Now, the following are the circumstances under which I have seen this condition of parts to arise:—

1st.—Peritonitis arising from the escape of faecal matters into the peritoneal cavity, through a perforating ulcer of the intestine.

2nd.—Peritonitis arising from the bursting of an abscess into the serous cavity.

3rd.—Peritonitis occurring after the operation of paracentesis in debilitated subjects.

In addition to these cases which I have myself witnessed, we may add, that low typhoid peritonitis, occurring after delivery, as described by Drs. Cusack and Gooch; and the peritonitis which results from rupture of the intestine, induced by external violence.

We can scarcely conceive a more severe and dangerous form of peritonitis, than that

arising from the passage of the intestinal contents into the peritoneal cavity. This disease, I believe, was first accurately described by Louis, in his *Anatomico-Pathological Researches*, under the name of Peritonitis from perforation of the small intestine. In all his cases the disease arose from a recent ulceration of some of the mucous follicles in the last nine or twelve inches of the ileum, which, perforating the mucous membrane on the one side, and the cellular and serous on the other, caused a direct communication between the intestinal and peritoneal cavities. Of this disease we have seen many examples in the Meath Hospital, in which, with scarcely an exception, we have diagnosticated the lesion previous to death; with but a single exception, the situation of the perforating ulcer was as described by Louis, and the cases in which this accident occurred, were chiefly those of *gastric fever*, idiopathic diarrhoea, and hypercatharsis, from an over dose of purgative medicine; cases, in all of which there exists an excited state of the intestinal mucous glands. In all our cases we found, besides the perforating ulcer, decided evidence of inflammation in the mucous membrane and neighbouring follicles, some of which were enlarged and vascular, others softened down and forming ulcers, the basis of which were frequently formed by the serous membrane alone.

The diagnosis in these cases is generally not difficult, being principally founded on two circumstances.

1st.—The sudden supervention of the peritonitis.

2nd.—The rapid sinking of the powers of life.

These circumstances occurring in a case where there were previous indications of a diseased state of the intestinal mucous system, formed the ground of our diagnosis. I need scarcely add, that we owe this to the researches of Louis.

There is here a sudden solution of continuity, and the diagnosis is founded on the same principles as that of other internal ruptures; for example, in cerebral apoplexy, rupture of the heart, or of aortic aneurism, pneumo-thorax from fistula, rupture of the bladder and uterus. It is true, that some of these accidents may take place without this suddenness of symptoms, so will also the disease under consideration; but these are exceptions to a general rule.

In the Report of the Meath Hospital, published by Dr. Graves and myself, in the fifth volume of the *Dublin Hospital Reports*, we have mentioned our opinion, that the principles of treatment in these cases do not appear to have been at all investigated or understood. Indeed, on the first view of this dreadful disease, it appears almost romantic to expect that any treatment can save life. Here is a violent, sudden, and universal peritonitis, brought on, less by the extension of diseased

action from one tissue to another, than by the introduction into the sac of a highly irritating fluid; a peritonitis, arising in a person, already the subject of another and severe disease, and constantly kept up by the continual ingress of the fecal matter from the tube. The disease runs its course in a very short space of time; and though the physician be called early, quoad the time, he is late quoad the disease, or at least the period of it when the usual mode of treatment can be available.

We cannot bleed in these cases, for the powers of life sink almost instantaneously. We cannot use mercury internally, for any thing that excites the peristaltic action of the intestine, will of course tend to keep open the communication, and the external use of mercury is too slow in its action to arrest the disease. The means of treatment, then, in common peritonitis, are unavailable, a doctrine quite consonant with theory, and receiving support from melancholy experience.

Yet, how rarely do we see a case of disease in which nature does not make some attempt towards a cure. We know, that in a few cases of perforation of the intestine, general peritonitis does not take place, as the effusion and organization of lymph prevents the transit of the fecal contents.

We have then, in the treatment of this disease, two indications. The first, to support the strength of the patient as far as this can be done without injury. The second, to prevent the further effusion in the peritoneal cavity, by endeavouring to induce organization and adhesions of the effused lymph. It is obvious, that towards fulfilling this last indication, all that is wanted is time, and to diminish the peristaltic action of the intestine as far as possible. Now in the exhibition of opium in large doses I think we have a remedy calculated to fulfil these ends.

I must here observe, that in proposing opium in large doses for the cure of bad forms of peritonitis, I am by no means original. Nine years ago Dr. Graves treated successfully two cases of peritonitis after tapping, and occurring in patients of a bad habit, by opium, without withdrawing a drop of blood, and more lately employed the same remedy in a case of peritonitis, from the effusion of purulent matter into the serous sac, to which I shall presently allude. Drs. Cusack and Gooch also have spoken of the utility of opium in low puerperal peritonitis; but I believe I was the first who, by applying these principles to the treatment of peritonitis, from perforation of the intestine, even dared to hope for the possibility of a cure in this disease, and in my hands the remedy has been administered with great boldness.

I shall now relate two cases where this treatment has proved efficacious.

A boy, aged 12, was admitted into the Meath Hospital, in September, 1829. He had been ill for ten days with symptoms of

an inflammatory affection of the digestive tube, for which no proper treatment had been adopted for the first seven days. He was then seen by Mr. Pakenham on account of a sudden aggravation of symptoms. This gentleman found him in a state of great exhaustion; pulse 58, sharp and intermittent; countenance sunk; the belly universally tender; frequent vomiting; diarrhoea and tenesmus. The belly was leeches, and calomel and opium exhibited; next day, the pulse having risen, a small bleeding was performed, but the blood was not inflammatory.

On admission, his countenance was collapsed, anxious, and expressive of dreadful suffering, the extremities were cold, and the pulse hardly perceptible. The respiration hurried, and the abdomen swelled, and exquisitely painful.

In this case I made the diagnosis of peritonitis, from ulcerative perforation of the intestine. It was plain that the antiphlogistic treatment could be pursued no further. From having witnessed the good effects of the opium treatment in the case of peritonitis, from purulent effusion, under Dr. Graves, I determined on attempting the same treatment. The black drop was given every second hour, so that in the next twenty-four hours the patient had taken sixty drops of this preparation. I also directed mercurial frictions to the belly, but these seemed to have no influence on the system. Next day the most marked improvement had taken place; the pulse had become full and soft, and the extremities warm; the countenance had altogether lost the hippocratic expression, and the patient could bear pressure on the abdomen. On the day before he was nearly insensible to surrounding objects, but now expressed great relief and confidence in recovery. The same treatment was persevered in for the next twenty-four hours, when *all* symptoms of abdominal inflammation had completely subsided. The belly felt natural; there was no tenderness; the pulse was good; and the patient declared himself well. At this period of the case I omitted the opium, and exhibited the mildest possible saline laxative, as no stool had taken place for more than forty-eight hours; four evacuations took place, followed by an immediate return of all his former symptoms, under which he speedily sunk.

DISSECTION.—The abdomen was distended and tympanitic; the intestines were everywhere agglutinated together, and adherent to the parietal peritoneum, except in the left iliac fossa, where a quantity of yellow puriform matter was collected. Small quantities of the same fluid were found between several of the intestinal folds, circumscribed by the effusion of lymph; general livid redness of the serous membrane. On detaching the caput coli from the peritoneum lining the right iliac fossa, a small perforation of the gut was discovered, by the escape of the contents of the intestine

in a jet. The serous membrane lining the iliac fossa, was found of a bluish colour, and softened for a space of three square inches; this change was also observed in the lower portion of the ileum. The perforation of the large intestine before mentioned, was apparently the result of an aphthous ulceration, as no glandular enlargement, or ulceration, could be detected round it. There, however, the mucous membrane was softened, and of a deep red colour, while the remaining portion of the intestine was healthy. — *Dub. Hos. Reports*, vol. v.

I shall remark merely on this case, that if my mind had not been warped by an early and unfounded prejudice as to the necessity of evacuations from the bowels, the life of this patient would in all probability have been saved. It is plain, that if in any case purgative medicine must be more hazardous than in another, it must be here, where the peristaltic action will constantly tend to prevent the closing of the ulcerated communication. The slight extent of disease in the mucous membrane increases the probability, that under other circumstances this patient would have recovered.

The next case had a more fortunate result, which I attribute to the dear-bought experience of the last.

A middle aged man was admitted on the 27th of June, 1830, apparently in the last stage of peritoneal inflammation. The disease was of three days standing, had supervened suddenly, in a few days after hypercatharsis, induced by a large dose of glauher salts, and followed by long-continued exposure to cold. It was attended by the usual symptoms of peritonitis, from ulcerative perforation of the intestine. The belly was swollen, and so exquisitely tender, that the slightest pressure made the patient utter screams. The countenance was hippocratic, and the patient tormented with constant hiccup. Coldness of the extremities had commenced, and the pulse was weak and slow. Before the hour of visit, leeches had been applied to the belly without relief; the patient was then ordered one grain of opium every hour.

The next day, it was found that the symptoms had improved. The patient had not experienced the slightest coma, headach, or delirium. The same plan of treatment was persevered in, the daily dose of opium being gradually diminished until the 7th of July, when the convalescence being completely established, the remedy was omitted. During this time diarrhoea set in for three or four days severely; this was treated by the application of a few leeches to the anus, and the use of anodyne enemata.

The patient took in all one hundred and five grains of opium (exclusive of that in the injections), without ever experiencing any of the usual effects of this substance, when ex-

hibited in large doses. — See *Mr. Hart's Essay, Dublin Hospital Reports*, vol. v.

I would submit that in this case there could be little doubt, but that the peritonitis arose from an ulcerative perforation of the intestine. The symptoms were perfectly similar to those in which we had before unerringly made the diagnosis, and the supervention of the peritonitic symptoms after the hypercatharsis, is quite in accordance with this view. The power of bearing these great doses of opium in these cases is most remarkable, and is almost always observed. How far the exemption from its usual effects on the nervous system is explicable by the violence of the abdominal disease, is worthy of consideration.

Since the occurrence of these cases, I have used the same remedy in cases of the ordinary peritonitis, where bleeding was inadmissible; and have had no reason to change my high opinion of its powers. In one case, where death took place, the remedy was borne without the slightest inconvenience. In two cases, lately occurring in the hospital, the same treatment has been pursued with the most striking benefit.

I shall now relate the case of hepatic abscess, which first led to this mode of treatment in peritonitis, from perforation of the intestine.

A woman was admitted, labouring under an enormous hepatic abscess, of four months standing. She was emaciated to the last degree, and laboured under severe hectic fever. It was attempted to give exit to the matter, by inserting a caustic issue over the abscess; but after a lapse of nine days, it was found that this had not succeeded. A small vulvar incision was then made through the ulcer, when a few ounces of puriform matter escaped. This operation was immediately followed by excruciating pain in the lower part of the belly, and a sensation as if matter was escaping into the peritoneal cavity. In three hours there was violent pain of the abdomen, increased by pressure on the extension of the knees, which she kept constantly drawn upwards; the countenance was anxious and collapsed. There was constant vomiting, and the patient uttered piercing cries. Pulse 146, small and wiry. Under these circumstances, Dr. Graves concluded, that the matter had found its way into the peritoneal cavity, and he determined on treating the case as he had formerly treated those of peritonitis after tapping. A blister was applied to the arm, and the vesicated surface directed to be sprinkled with the acetate of morphia. Half-grain doses of opium were given every two hours, and porter allowed for drink. The patient bore the opium without any inconvenience, and in a few days all the symptoms of peritonitis subsided. She ultimately sunk in a state of complete exhaustion, twenty-seven days after the operation.

On dissection, the liver was found enormously enlarged, with its convex surface

adherent to the parietal peritoneum: A vast abscess occupied nearly the whole of the right lobe, coming to within a few lines of the serous membrane superiorly; in the left lobe were several small abscesses. There was no fluid effusion or other marks of inflammation in the peritoneum having existed at the time of death; but it was evident, that the patient had recovered from a recent peritonitis, as all the convolutions of the intestines were connected by lymph, in a state of semi-organization; it was not yet transparent, and vessels could be distinctly seen running through its substance.—*Dublin Hospital Reports*, vol. v.

We have every reason to believe, that this was a case of peritonitis, from the effusion of pus into the peritoneal cavity. The small quantity of matter given exit to, and the *immediate* supervention of the symptoms, with the appearances on dissection, strongly go to prove the truth of this opinion. In this also, it is remarkable, that although the patient was in the very last stage of marasmus and debility, she bore these large doses of opium without the slightest inconvenience.

I have now detailed cases illustrative of the utility of opium in large doses in peritonitis, arising from the introduction of fecal and of purulent matter into the serous cavity. I would further propose it as a remedy in cases of rupture of the bladder and uterus, and in peritonitis after the operation for strangulated hernia. I am at present trying its powers in a case of recent pneumo-thorax from pulmonary fistula. In two cases of peritonitis after tapping, where the patients were in a low state previous to the operation, the exhibition of these large doses of opium, without drawing any blood generally or locally, has succeeded in my hands in removing the disease and saving the life of the patient. This appears to be a peculiarly appropriate case for the opium treatment. The patients are generally cachectic, either from original constitution or the disease. They almost all labour under visceral disease and obstruction, and a state of collapse commonly follows the operation. All these circumstances go strongly against our use of the usual antiphlogistic treatment; it was in a case of this kind which occurred in the old Meath Hospital, in the year 1822, that Dr. Graves first ascertained the great importance of opium in this disease. A woman had laboured under ascites, for which she was tapped; the operation was followed by the symptoms of peritonitis. When Dr. Graves saw her, she appeared in the last stage of the disease, she had constant vomiting, hippocratic countenance, cold extremities, the belly exquisitely tender, and the pulse 160 in the minute, and nearly imperceptible. The case appearing hopeless, Dr. Graves determined on merely endeavouring to allay the distressing symptom of vomiting, and administered a drachm of laudanum. The patient soon after fell asleep, and awoke

refreshed, with a more warm surface and fuller pulse; the vomiting had ceased. The same remedy was used in smaller doses every fourth hour, and in the course of two days all the unpleasant symptoms had disappeared.

I now proceed to submit some cases of diseases of mucous membranes, where the use of opium has proved efficacious. From having witnessed its utility in cases of inflammatory states of serous membranes, where the inflammation might be termed, for want of a better name, *asthenic*, it appeared probable, that the same condition of mucous membranes might be benefited by it.

It is now some months since I was called to see a gentleman labouring under all the symptoms of gastro-enteritis, in a severe form. He had considerable fever; thirst urgent; constant smacking of the lips; respiration hurried, *without disease of the respiratory system*; a red tongue, and great tenderness of the belly. The usual treatment was pursued, but the disease shewed great obstinacy, and after six weeks continuance the situation of the patient appeared hopeless. At this time a violent bronchitis supervened, and so great were the sufferings of the patient from the accumulation of mucus in the trachea, that, on three occasions I left him, never expecting to see him again. It was remarkable, that during this attack, the symptoms of abdominal disease greatly subsided. Under a stimulating treatment he recovered from the bronchitis, only to relapse into his former state. The abdominal symptoms now became still more urgent; the belly swelled from tympanitis; the verge of the anus became surrounded by large and irritable hæmorrhoides; there was extraordinary prostration and constant low delirium. Under these circumstances, a diarrhœa supervened, at first slight, but afterwards so severe as to threaten every day death from exhaustion. A great variety of means were tried, but without avail. At this time, when the patient seemed in articulo mortis, I ordered him a grain of opium every hour; this he took regularly for the first twelve hours, *without any inconvenience*, and he experienced some refreshing sleep. Next day, the remedy was continued in the same dose every second hour, and from this time his improvement was rapid; and I rejoice to say, that he is now in the enjoyment of good health.

This was a fair case for the trial of this *heroic* remedy, as all our other means had failed. I have never seen a disease more intractable to common treatment, than the diarrhœa under which this gentleman laboured.

The next case is one to which I confess I look back with great pleasure. It is that of a patient named Molyneux, who was admitted in the beginning of February last into the Meath Hospital, complaining of sore throat and pain shooting through both ears. His countenance was haggard; his voice raucous;

and the body emaciated. An extensive and unhealthy looking ulcer, covered with a whitish matter, was found to occupy the left tonsil, the back of the pharynx, and left side of the uvula. The patient denied having had venereal, but circumstances led us to suspect this; he had, however, been frequently salivated in India for abdominal disease and fevers. He first felt the soreness of his throat six weeks before admission, which was the time when his vessel made the British channel. We ordered the patient the sarsaparilla decoction with nitro-muriatic acid, and touched the sore with a strong solution of nitrate of silver, which caustic was changed in some days for the butter of antimony. No good effect was produced by these means, the sore extended quite round the uvula, which it rapidly destroyed. The breath became fœtid; the cough laryngeal; the patient's appearance was still worse than on admission; his nights were sleepless, and he complained much of pain in the head.

I now changed the plan of treatment; omitted the sarsaparilla and the lotion, and ordered a gargle of chloride of lime with the internal use of six grains of opium daily, and an increase of his wine. At once the sore began to assume a more healthy appearance; the fœtor of breath diminished greatly, and in a few days wholly disappeared. After a short time, in consequence of want of sleep, we increased the dose to eight grains, on which he has been kept since the 20th of February. The sore is now healed, and the whole state of the patient singularly improved.

This man has, in the course of a few days, taken upwards of a hundred grains of opium, without experiencing any of its poisonous effects. His slumbers have been light and interrupted, his intellects clear, and his bowels have not been constipated, as he has had one evacuation daily, since the beginning of this treatment. He only complains of a slight difficulty in passing urine. In this respect, the case resembles those which I have brought forward, and I may here mention, that whenever the remedy produces its poisonous effects, it appears to be a sign that in that particular case, its singular influence over inflammatory action will not be produced. Like the tartar emetic, as observed by Laennec, it acts best where there is no sensible effect produced, but the diminution of the local disease.* There is at present in the Meath Hospital, a woman, who for an enteritis, has taken eighteen grains of opium in the last forty-eight hours: in this case, there was, previous to use of the opium, re-

tention of urine, but this has now completely subsided.

I know of the case of a child who laboured under infantile remittent. After some time diarrhœa came on, with a great increase of fever. Small doses of Dover's powder were ordered, but the mother accidentally gave several doses at once. The child fell into a profound coma, which lasted for two days, at the end of which it awoke, perfectly free from fever, and had a large and healthy evacuation. In this case there was no relapse.

Hitherto I have alluded to the employment either of simple opium, or its tinctures. In Dr. Bardsley's interesting collection of Medical Observations, several cases are detailed, where, in affections of the stomach, the acetate of morphia was employed with benefit. I am persuaded, that it is a remedy of great power, particularly in chronic cases of dyspepsia, where there is much acidity. I was consulted some months back by a gentleman who has led a very dissipated life, and who for the last ten years has been a martyr to the worst symptoms of dyspepsia. About two years ago, he had a violent attack of hæmatemesis, and latterly, the stomach had become so irritable, that it was scarcely possible to find any article of diet to agree with him. His sufferings were dreadful. After trying other means ineffectually, I ordered the $\frac{1}{4}$ th of a grain of the acetate twice a day. He took the remedy three times in the day, with the most perfect relief. The secretion of acid, which had been enormous, was suddenly checked, and the patient in two days declared that he felt better than he had done at any time for the last ten years. His appetite was good, and he foolishly indulged in articles of diet from which he had long abstained. On the fourth day, while in the highest spirits, he became pale; fell, and threw up several pounds of blood. The remedy was of course omitted. In about a fortnight, all the former unpleasant symptoms returned, and his indigestion was as complete as ever. I now ventured on exhibiting the morphia again, but in the doses of the 1-16th of a grain, twice in the day. This diminished dose again produced the same improvement, but in a few days was followed by a return of the hæmatemesis.

The next case, is one of a gentleman who has been for a length of time in the East Indies, and who has become a victim to hepatic disease. He is subject to attacks of pain in the epigastrium, followed by jaundice and fever. These have been treated by leeching, purgatives, and the use of mercury; but during the last attack, his debility was so great, that I did not wish to venture on this treatment. The acetate of morphia was given twice a day. It was commenced on the 26th of December, and continued till the 18th of February. The greatest improvement has been made in this gentleman's

* It is most interesting, that in this case and in another, no narcotism was produced until the patient was convalescent, as if the existence of the disease caused the tolerance of the opium.

state. The pain has disappeared; there is now no tenderness; the jaundice has subsided, and what is most remarkable, his bowels now act regularly without the assistance of medicine. He has gained flesh, and his whole appearance is singularly improved.

I had intended to add to this paper, the results of some researches on the exhibition of opium in free doses, in cases of fever, where there is a species of excitement of the nervous system, very analogous to that which occurs in delirium tremens, but as I propose to pursue this investigation farther, I shall reserve the results for a future communication.

It is proper to observe here, that the exhibition of opium in large doses has been proposed by Mr. Hart, in cases of fecal effusion into the peritoneum, from injury of the intestines, with a view of controlling the peristaltic action. In this opinion, Mr. Hart has approached to the doctrines put forward in the Report of the Meath Hospital, by Dr. Graves and myself.

The following conclusions appear justifiable from the facts now recorded.

1st.—That in certain cases of inflammation of serous and mucous membranes, where depletion by blood-letting, or other antiphlogistic measures are inadmissible, and the system in a state of collapse, the exhibition of opium has a powerful effect in controlling the disease.

2nd.—That under these circumstances, the remedy may be given in very large doses, with great benefit and safety.

3rd.—That its effect then is to raise the powers of life, and remove the local disease.

4th.—That the poisonous effects of opium are rarely observed in these cases, the collapse and debility of the patient appearing to cause a tolerance of the remedy.

5th.—The cases in which the utility of this practice has been ascertained, are as follow :

Simple peritonitis, in a stage where bleeding cannot be performed. Low puerperal peritonitis. Peritonitis from perforation of the intestine ; from the opening of an abscess into the sac ; or lastly, after the operation of paracentesis in debilitated subjects. Violent diarrhoea, supervening in an exhausted subject. Phagedenic ulceration of the throat, in a similar individual. And cases of chronic gastritis, and gastro-duodenitis in patients exhausted by the long continuance of the disease.

6th.—The cases in which this mode of treatment would be probably useful are,—peritonitis from rupture of the bladder, or uterus, traumatic rupture of the intestine, or after the operation for strangulated hernia.

The last observation which I shall make here is, that in most of these cases, particularly in those of diseases of serous membranes, wine was given in conjunction with the opium, and in all the patients were supported by a lightly nutritious diet.

THE CENTRAL BOARD OF HEALTH.

THERE is an old adage, “after meat, mustard,” which applies to the following elaborate piece of intelligence on the prevention and treatment of cholera, brought forth by that sagacious body called the Central Board of Health, which strongly reminds us of the mountain in labour, and its puny offspring, the ridiculous mouse. The world must admire the wisdom of the Board in recommending the mode of preventing and treating epidemic Cholera after the disease has ceased. The profound judgment apparent in advising the pills, No. 2, to those predisposed to diarrhoea, must excite the admiration of ordinary practitioners.

We can only observe, that on Sunday last we visited a gentleman in Parliament-street, close to the Board, who was attacked with severe cholera, spasms of the extremities, and abdominal muscles, from taking pills of this kind without the addition of an aromatic. We place before our readers the abortion of the Board, after a laborious labour of six months duration, as an extraordinary specimen of the preternatural conception and progeny of that body, and well worthy of the notice of the medical profession in all countries. Our foreign readers, however, must not suppose that the Parent is the representative of the faculty in London, as owing to the distracted state of the profession in England, three army surgeons were placed over the heads of our Colleges of Physicians and Surgeons, and constitute the said conclave.

Council Office,
Central Board of Health,
9th May, 1832.

Precautionary Hints to Persons residing in Places suffering, or likely to suffer, from Cholera; with Concise Directions for the Treatment of those threatened with, or actually attacked by, the Disease, in Situations where Medical Advice cannot be immediately obtained.

HEADS of families living in the country, and benevolent individuals wishing to afford remedial assistance in this destructive malady, ought to provide themselves with the following articles, viz.:—

	lbs.	oz
Tincture of opium (laudanum)	0	2
—— of catechu.	0	4
—— of assafetida.	0	4
Aromatic spirit of ammonia	0	4
Compound spirit of lavender	0	2
Oil of peppermint	0	0 $\frac{1}{2}$
Castor oil	2	0
Ipecacuanha in powder . . .	0	2
Mustard in do. (best Durham)	10	0
Compound chalk powder. . .	0	4
Sulphate of quinine.	0	1

Six dozen pills, No. 1 :—

Calomel, $2\frac{1}{2}$ grains ;

Opium, $\frac{1}{4}$ grain ;

Cayenne pepper, 2 grains ; in each pill.

Three dozen pills, No. 2 :—

Calomel ;

Compound extract of colocynth ; of each $2\frac{1}{2}$ grains in each pill.

Three dozen pills, No. 3 :—

Blue pill, 2 grains ;

Rhubarb, 2 grains ; in each pill.

Powders, No. 4 :—

Calcedined magnesias, 2 parts ;

Rhubarb in powder, 2 parts ;

Ginger in ditto, 1 part, carefully mixed ; 1 ounce.

Powders, No. 5 :—

Calomel, 1 grain ;

James's powder, 2 grains ;

Nitre in powder, 5 grains ; $\frac{1}{2}$ ounce.

Liniment, No. 6 :—

Compound soap liniment, with opium, 8 parts ;

Tincture of cantharides, 1 part ; 3 ounces.

Mustard Poultice, No. 7 :—The mustard poultice is made by mixing equal parts of mustard powder and crumb of bread into a paste with hot water ; or by mixing equal parts of mustard powder and thick porridge.

Bags, or stockings, to hold heated bran or salt.

Stomach and feet warmers.

Enema syringe.

A graduated glass measure (1 ounce.)

A set of scales and weights (grain.)

The above supply is calculated for the number likely to be attacked in a population of 500 ; and in price, as estimated by a London chemist, will not exceed 3*l.* 3*s.*

Precautions.

1. *The Clothing* should be warm. Woollen stockings ought to be worn, and flannel next the skin ; at least over the belly and loins.

2. *Diet.* — Avoid, above all things, overloading the stomach. Indigestion, however produced, disposes the body to this disease. If in easy circumstances, take for dinner a moderate quantity of roast meat in preference to boiled, with stale bread or good potato, two glasses of wine with water, or an equivalent of weak brandy or whisky and water, or of sound porter or ale. Eat garden stuff and fruit sparingly, and avoid fat luscious meats. In short, whilst under apprehension of cholera, use a dry, nutritive diet, sparing rather than abundant ; observe great caution as to eating suppers, for cholera most frequently attacks about midnight, or very early in the morning.

In case of costiveness, take one or two of the pills No. 3. going to bed ; or one or two of the pills No. 2. in the morning, should no effect be produced by No. 3. ; but avoid salts, senna, and all cold, drastic purgatives.

3. *Exercise.* — Moderate exercise in the open air, in fine weather, is conducive to health ; but the greatest care should be observed by all, more especially by the weakly and the aged,

not to carry that exercise to fatigue or profuse perspiration, nor to sit down with wet feet or wet clothes.

Treatment of the Premonitory Symptoms of Cholera.

4. In a very large majority of cases, the attack of cholera is preceded by a looseness of bowels of longer or shorter duration, say twenty-four hours. It is in this stage that remedial assistance is most efficient, and that life may be saved with the most certainty, by checking the disease in its commencement. When, therefore, the bowels become relaxed without an obvious cause, where cholera is prevailing at the time, the following measures should be adopted without loss of time :—

5. In the case of adults, previously healthy, let blood be taken from the arm to eight or ten ounces, or by ten or twelve leeches to the pit of the stomach, or by cupping.

Should the loose motions be of a darker colour than natural, give two pills of form No. 2, and four hours after a table-spoonful of castor oil, floating on half a wine-glass-full of gin and water, brandy and water, or cold coffee, with ten drops of laudanum if there be griping pains, confine the patient strictly to bed, and give the following draught at night :—

Cinnamon or peppermint water, half an ounce ; * laudanum, twenty-five drops.

6. When the purging is of the ordinary, bilious, and fæculent kind, with griping and flatulence, give ten drops of laudanum and forty of tincture of catechu in the same vehicle, every hour, for five or six hours ; or twenty grains of the compound chalk powder every second or third hour, should relief not be obtained sooner.

A warm bath for half an hour, followed by rubbing with flannel or flesh

brushes ; warm fomentations to the belly by means of bladders half filled with hot water, or flannels soaked in hot spiced wine, or in hot spirit and water, will afford much relief.

7. When there are cramps, a desert-spoonful or two of the liniment No. 6. should be assiduously rubbed on the part affected.

8. If there be nausea or sickness, without acute pain at the pit of the stomach, give an emetic of twenty-five or thirty grains of ipecacuanha in half a pint of warm water.

9. When giddiness and pain at the pit of the stomach are present, bleed as above, and give a tea-spoonful of the aperient powder No. 4.

10. Let the diet in all these premonitory stages consist of light farinaceous preparations : sago, tapioca, panada ; chicken broth and tepid drinks to promote perspiration.

11. Should debility, with chills and sweats, remain, give two grains of sulphate of quinine three times a day for two or three days. This medicine will often be found to check the relaxation of the bowels.

First Stage of the Attack—Treatment.

12. When the motions have lost the appearance of fæculent matter, and have put on that of rice water or chicken broth, with vomiting of similar liquids, spasms, intense thirst, irregular, slow, and weak pulse, give an emetic of half a pint of a solution of common salt, as strong as it can be made, with a tea-spoonful of mustard powder. Place a mustard poultice, No. 7, over the whole stomach, belly, and front of the short ribs, having previously rubbed the parts with the liniment. Give one of the pills No. 1, every alternate half-hour, and in the intervals two table-spoonsful of weak brandy or whisky and water ; cold if preferred. Let the patient drink cold water or iced water if it can be had, allowing no more than two or three table-spoonsful at a time, or bits of ice the size of a nut may be given to be swallowed whole,

* Peppermint water may be made by rubbing down five drops of oil of peppermint with half a tea-spoonful of sugar, adding a table-spoonful of water by degrees.

to allay the burning sensation at the pit of the stomach. Let bags or stockings filled with heated bran or sand be placed along the patient's spine or sides, and feet warmers applied to his feet. Let him be kept still, if possible, wrapt in warm blankets, but not oppressed with heat or coverings, particularly over the chest and neck.

Second Stage of the Attack.

13. If, notwithstanding these measures, the patient should appear to be sinking, the pulse becoming weaker, the skin colder, the breathing more laborious, the individual appearing less anxious about his own situation, then, in addition to the steady application of the measures already recommended, let an injection be thrown up the rectum, consisting of two or three pints of water, as warm as the hand can conveniently bear, with a small wine-glassful of brandy or whisky, to be repeated, if thought necessary, at intervals of an hour.

Third Stage.

14. When the pulse at the wrist has ceased, or become almost imperceptible, with coldness of the extremities, and perhaps blueness of the surface, particularly of the lips, hands, and feet; irregular breathing, loss of voice, suppression of urine, ghastly countenance, without delirium: although under these awful circumstances there is but little room for hope, our exertions should not cease.

15. At this stage of the attack the vomiting and purging will generally have ceased, or at least be much diminished; the belly will be drawn in, and pain, sinking, and death-like oppression will be felt about the heart.

16. Let the hot water injection be repeated, with two or three drachms of the tincture of assafoetida, and retained for some minutes by means of a napkin.

17. Let mustard poultices be applied to the inside of the thighs and

calves of the legs, in addition to that on the belly, which may be removed to the sides of the chest or back; let the limbs be diligently rubbed with warm cloths; let small quantities of light cordials be given at intervals, such as a tea-spoonful of compound tincture of cinnamon, or of aromatic spirit of ammonia, in a table-spoonful of water, and let the treatment ordered for the second stage be continued until the pulse becomes distinctly perceptible at the wrist.*

Stage of Re-action, or Fever.

18. When the pulse has begun to rise, and the heat and natural colour begin to return to the surface, keep the patient perfectly quiet, but let him be carefully watched, for a sudden sinking of the powers of life not unfrequently occurs at this period of the disease. Opiates of all kinds must now be withheld; and wine, brandy, and other stimulants used very sparingly, and withdrawn altogether as soon as the pulse and heat are steadily re-established; when mild tepid drinks are to be substituted, and the powder No. 5, given every hour, instead of the medicines hitherto used, should the bowels be torpid.

19. Under this treatment a warm copious sweat often breaks out, or a more healthy discharge takes place from the bowels, or some urine is passed, which of all others is the most favourable sign. When such is the case, the patient, with proper care, will often pass into a state of convalescence, without further difficulty or danger.

20. It often happens, however, not-

* The following plan of treatment, proposed by Dr. Stevens, and acted upon under his direction, has excited some notice, and is stated to have been attended with very considerable success in all stages of the disease:—

Supercarbonate of soda, $\frac{1}{2}$ drachm.

Muriate of soda (common salt), 20 grains.

Chlorate of potass, 7 grains.

To be given in half a tumbler of water every hour, until the patient begins to recover from the collapse.

Dry heat, frictions, mustard poultices, and injections of hot salt and water were used at the same time.

withstanding all our care, that the re-establishment of the pulse and heat are closely followed by symptoms of fever, or by some degree of stupor, or by great oppression of breathing, or by distension and tenderness of the belly; all of which indicate danger.

21. The moment such symptoms appear, bleed from the arm, or from the part most affected, by leeches or cupping, to 10, 12, or 16 ounces, according to the effect produced by the bleeding. Reduce the temperature of the patient's room, give cool drinks, and apply cold wet cloths or pounded ice in bladders to the head; and give the powders No. 5, as already ordered.

22. When convalescence has begun, observe the strictest care as to diet. At this period a full meal has, in numerous instances, brought on a relapse. Indeed, animal food, even in small quantity, under these critical circumstances, has often been attended with dangerous consequences to those just recovering from cholera. To such, even the mildest articles of food should be given in much smaller quantities and at shorter intervals than to those in health; and their ordinary diet and habits should be very cautiously resumed.

W. PYM, Chairman.

UNIVERSITY OF LONDON.

SURGERY—SESSION 1831-32.

Examinations for Prizes and Certificates of Honour.

EACH question is to be answered in writing. The questions will be delivered at twelve o'clock, and no papers containing the answers will be received after six o'clock. Those who have finished sooner need not wait, but may give in their answers when ready. The answers must be signed with the motto which the student has adopted.

The numbers subjoined to each question denote the relative value that will be assigned to the answers when

correctly given; but the Examiners will use their discretion in increasing or diminishing this printed value, according to their estimate of the merit of the answer.

The examiners do not desire a return to all the questions; the student may select what subject he pleases; he may answer many of the questions shortly, or fewer of them at length; but the Examiners would prefer short and distinct answers to a competent number of the questions, as affording them a greater facility of estimating the acquirements of the student.

The aggregate value of the answers to all the questions in this class is 1380, and no certificate of honours will be given to those who have less than two-thirds of that amount.

No.	Value.
1. What are the symptoms of idiopathic iritis?	40
2. Of syphilitic iritis?	40
3. Of gouty iritis?	40
4. How would you treat iritis in general?	50
5. What is the first indication in the treatment of wounds?	10
6. What other objects require attention before the dressings are applied?	20
7. What are the processes called, by which the different kinds of wounds are healed?	10
8. Which process is the most desirable, and on what grounds?	10
9. What description of wounds is most susceptible of it?	10
10. How is it to be promoted?	20
11. What effect has a tight, smallish, firm round ligature upon the coats of an artery?	10
12. What is the process employed by nature for the suppression of bleeding from a completely divided artery?	60
13. Does any difference attend the process for the stoppage of hæmorrhage from the mouth of the vessel furthest from the heart?	60
14. What is the process employed by nature for the suppression	

No.	Value.	No.	Value
		28.	Where does the most common form of bubonocoele begin to protrude, and what course does it follow ? 30
15.	What are the chief surgical means for the stoppage of hæmorrhage ? 20	29.	Specify the several coverings of the sac, beginning with the most superficial. 50
16.	What rules should be observed in the choice and application of ligatures ? 50	30.	Where does the direct inguinal hernia quit the abdomen ? And what part does it first pass through, or dilate ? 40
17.	How would you proceed, if called to a wound, in which a considerable artery had been completely divided, and in which its bleeding orifices were exposed ? 10	31.	How is the epigastric artery placed with respect to the three varieties of inguinal hernia, and in which direction would you cut the stricture in each example ? 50
18.	If the bleeding orifice, or orifices of a wounded artery were concealed by the narrowness of the external wound, what practice would you adopt ? 20	32.	Where does the femoral, or crural hernia protrude ? 20
19.	What is the established rule of practice when an artery is punctured and requires the ligature ? 20	33.	What parts constitute the boundaries of the opening, through which the sac quits the abdomen ? 50
20.	Name the several kinds of dislocation to which the shoulder is liable, in the order of their frequency ? 30	34.	What prevents the protrusion from taking place further from the pubes ? 50
21.	Where is the head of the bone situated in each case, and what are the symptoms ? 60	35.	Over what muscle does the femoral hernia descend ? 20
22.	What principles are to be observed in the reduction of dislocations of the shoulder ? 50	36.	How is the neck of the sac placed with respect to the femoral vein, and the spermatic cord in the male subject ? 30
23.	What are the varieties of dislocation, to which the hip-joint is subject, and enumerate them in the order of their frequency ? 30	37.	How is this hernia situated, with regard to the fascia of the thigh ? 20
24.	What are the symptoms of each dislocation of the hip-joint ? 60	38.	How is the falciform process of the fascia lata produced, and how is it related to the femoral hernia ? 50
25.	In which direction would you make the extension, if the head of the femur were thrown on the dorsum of the ilium ? 20	39.	What parts cover the hernial sac ? 40
26.	After having made the requisite extension, how would you proceed in order to get the bone into the acetabulum ? 20	40.	How would you divide the stricture ? And what are the most approved methods ? 50
27.	What are the three chief kinds of inguinal hernia ? 10	41.	What particularities in the arrangement of arteries sometimes make the business of dividing the deeper part of the crural ring one of much danger ? 40

The prizes were awarded to the following gentlemen;—Gold medal to

Mr. Layon of Bristol; first silver one to Mr. Rayner of Lincoln; and the second silver one to Mr. Hartley. There were twenty-two certificates of honour to other gentlemen.

SAMUEL COOPER, Professor.

April 23rd, 1832.

BARON CUVIER.

THE obsequies of Baron Cuvier took place on the 16th. The funeral was attended by vast numbers, amongst which were ministers, peers, dignitaries of various grades, some of the most celebrated men of the age for science, and deputations from all the learned institutions of Paris. The pupils from the schools of medicine, law, &c. were present in considerable force, and took part, successively, as pall bearers.

The custom which appears to us so ridiculous, of delivering panegyrics at the grave of an eminent man, on his burial, was carried on this occasion to an unusual extent. The two clergymen (one of whom had already preached a sermon on the life of Cuvier,) commenced by uttering a most affectionate farewell to the deceased. They were followed, in succession, by M. Devaux, who spoke for the Council of State; M. Arago, for the Academy of Sciences; M. de Jouy, for the French Academy; M. Geoffroy St. Hilaire, for the Zoologists of the Institute; M. Dumeril, for the Museum; M. Pariset, for the Academy of Medicine; and M. Walckenaer, for the Academy of Inscriptions. Military honours were likewise paid to the deceased, for he had been a commander of the Legion of Honour.

No eulogy, however, which even such an exciting occasion could draw forth, would have been undeserved by Cuvier. To him it is that we are indebted for the science of comparative anatomy, such as we are enabled to study it in the present day. It is true the subject was attended to long before his day, by great and eminent

men: but that basis of eternal truth, admirable order, and exquisite beauty, on which this science now remains permanently fixed, is entirely the result of the stupendous labours, the comprehensive genius, and philosophic caution of Cuvier, and abundantly entitles him to all the honours of a discoverer.

To the illustration of this great branch of human knowledge were the various works of this extraordinary man almost exclusively devoted; and to exhibit the wonderful perfection to which his knowledge of the intimate composition of animal structure enabled him to carry his system of analogical classification, we need only refer to the well-known fact, that from the fragment of the skeleton of any animal, even the fossil tribes included, Cuvier could readily describe its whole conformation, character, and habits when alive.

Independantly then of the infinite services rendered by Cuvier to the science which he cultivated, he has conferred still greater obligations on the civilized world, by the memorable example which he has left us in his life and labours, of the inestimable value of the *inductive method*, as described and recommended to all inquirers, by the immortal Bacon. Cuvier observed patiently, and generalized slowly; and, like those of Newton, his conclusions will remain undeteriorated for all time.

We shall hear, no doubt, from those who make the political opinions of every man, the test of his general character, that Cuvier was a flatterer and a favourite of kings. To all insinuations against his integrity, which the political conduct of the great naturalist may call forth, this answer is sufficient—he died a poor man.

No lust of gold—no sordid attachment to that earthly dross, out of which the vulgar race of men fabricate the god of their idolatry, perverted or even retarded the course of his noble ambition. That disinterested devotion to science which made him indifferent to his domestic interests,

has been splendidly returned by a grateful country, in its adoption of that family which the benefactor of his race was obliged to overlook.

The widow, by a decree of the government, is to receive 6,000 francs a year, (the highest pension in the power of the state to give), and to keep the official residence of her late husband during her life. The museum of comparative anatomy, a monument of individual labour, such as by itself is sufficient to be a source of immortal renown to its founder, is to be purchased by government for public purposes.

It gives us great pleasure to be able to state, that shortly before his decease, Cuvier completed the necessary arrangements for the publication of his *Natural History of Fishes*. M.M. Valenciennes and Laureillard, his colleagues, are entrusted with the important duty of laying before the public this great performance, and also such other works as Cuvier may have appointed to be published.

We are informed, by some of the French papers, that the medical men (consisting of the principal surgeons and physicians of Paris) who attended the autopsy of Cuvier, were struck at the enormous size of the brain, and particularly with the prodigious number of the convolutions on its surface. A cast has been taken of this brain.

It is highly honourable to the good sense of the French nation, that a man who had attained so exalted an eminence by his own efforts amongst them was a conspicuous dissenter from the national religion. Baron Cuvier lived and died a Protestant.

subject with ability and judgment. He commences, chapter xv., at which we stopped in our analysis, with an account of abortion, under the ordinary and diseased state of the ovum. He dwells emphatically on the injury which the general health of the female sustains, and the train of nervous and hypochondriacal affections which are induced, and which often continue for years. It is surprising how little consideration is given to abortion either by the sufferer or the medical practitioner, in most instances; and hence the frequency of the distressing complaints caused by it. Our author gives an accurate description of the ovum and its attachments, for the purpose of illustrating the manner in which abortion is accomplished. He examines the various theories of numerous obstetric writers on the causes of this disease, and clearly refutes most of them. His description of all the causes of abortion is good, but might be better. With respect to the treatment we find nothing novel: the author recommends venesection in the early months, about the time of the menstrual period, when the woman is plethoric. This remedy, we are properly informed, will seldom prevent the expulsion of the ovum when separation has commenced. In one instance Dr. Dewees bled his patient seventeen times before he succeeded. Rest and opiates are strongly recommended, and with great propriety:—Mr. I. also advises a separation or an abandonment of conjugal familiarity after conception, in cases in which frequent abortion has occurred. There is no doubt of the importance of this recommendation, without which no treatment can prevent abortion. It is a singular fact, that all the inferior animals rigidly avoid sexual commerce after conception, and that man alone violates the dictates of nature. Our author relates two cases in which abortion had happened several times, but was completely prevented by small and repeated bleedings at the expected menstrual pe-

A Practical Treatise on Uterine Hæmorrhage in connexion with Pregnancy and Parturition. By JOHN T. INGLEBY, M.R.C.S.L.

(Continued from page 473.)

WE resume our notice of the work before us with much pleasure, as the author has, in general, treated his

riods. When there is a syphilitic taint the specific action of mercury may prove efficacious, though it sometimes produces the event it was intended to prevent. Allusion is next made to the facility with which abortion occurs in some cases, without any premonitory symptoms; but such cases are known to every obstetrician, and require no farther notice. Our author considers that the treatment of threatened abortion would be materially influenced by the circumstance of the fœtus being living or not; and the diagnosis is only to be established by auscultation, as proposed by Kergadarec, Ferguson, and others. The physical signs of the death of the fœtus should be duly estimated at the same time. It is also to be recollected that the detached portion of the placenta seldom or never adheres to the uterus, and therefore there is almost a positive certainty of abortion when this has occurred. It is scarcely necessary to state that the ovum, when blighted in the early months, may remain in the uterus until the completion of uterogestation. In some cases a substance is expelled, which at first sight may be mistaken for the ovum, but on examination will be found not to contain the embryo. Mr. Ingleby recites a case in illustration of this fact at the sixth month. The fœtus was expelled at the full period, in a state of putridity. In addition to the hæmorrhages the patient had, for many weeks, a constant and offensive draining.

Three interesting cases are related in exemplification of our author's views, and in one of these a female catheter had slipped into the bladder, and became permanently fixed in a transverse direction. He was called in, and succeeded in extracting it by means of a slender pair of forceps; but abortion followed in three days. "I embraced the instrument," says he, "near one end, and with two fingers of the left hand, passed into the vagina, carefully elevated the other end; and having thus brought it into a horizontal direction, gently extract-

ed it." This is a very interesting and instructive case.

Our author next alludes to diseased states of the ovum as causes of abortion, and these he describes with great minuteness and accuracy. He also makes many judicious remarks on the employment of opium, acetate of lead, and digitalis, in uterine hæmorrhage, and condemns the latter as a dangerous remedy. He is a strong advocate in favour of the tampon, or plug, which he properly remarks is not so generally employed as it ought to be, notwithstanding the just praises bestowed upon it by Dewees, Burns, and many other modern obstetricians. He has found it of great value in the early months of uterogestation, from the non-dilatability of the uterus; and to prove its beneficial effects he narrates a case of fatal hæmorrhage, at the second month of pregnancy, and another at the fourth month. He prefers lint, cotton, &c., torn in strips, to a sponge or other large substance, as a tampon; a suggestion which we have made some years ago, for this reason, that proper pressure can be made against the os uteri, which cannot be done when either of the former is employed. In a case of excised hæmorrhoids, in which the patient had voided two chamber utensils full of blood, life was preserved by plugging the rectum, and the only evil consequence produced was retention of urine.

Our author appears to contradict himself, when he says he would not hesitate to pass the hand into the uterus after the completion of the fourth month, though, in the concluding part of the very same paragraph, he condemns Dr. Blundell for recommending it with all possible caution, even when the operator's hand is small. He says, "exceptions may undoubtedly arise, but as a general rule it is impolitic as it is unsafe, to hazard the attempt antecedent to the sixth month of uterogestation." This objection was raised by a writer, whose labours Mr. Ingleby has often turned to account without due ac-

knowledge. We speak advisedly, when we state, that Dr. Blundell is entirely averse to this doctrine, which was, by some means or other, ascribed to him by the reporter of his lectures; and this avowal he made in answer to the strictures of our colleague, Dr. Ryan, on this practice. We know, from personal experience, that there is not a more cautious, judicious, safe, or scientific obstetrician in existence than Dr. Blundell, and we regret that any such opinion should stand on record as his. But Mr. Ingleby is, of course, perfectly justified in quoting his lectures as published.

Our author next alludes to the consequences arising from retained placenta in the early months of pregnancy, in consequence of decomposition, and advises the usual remedies in such cases.

Here we must conclude our notice of this work, as so many other productions claim our immediate attention, that it is utterly impossible for us to extend our remarks any farther. We regret this, as we should have liked to notice every page of this volume; but we console ourselves with the reflexion that we have given ample evidence to our readers of the able manner in which it is executed. It is certainly a valuable addition to the medical library, and will be perused with interest by every obstetrician. It embraces many points omitted by Dr. Rigby, and omits many described by the present Boudelocque, of Paris.

In parting with our author we do so with sentiments of respect; and though we have differed from him on some points, we highly approve of his work. It abounds with practical information, and is, in our opinion, the best on the subject in the English language.

The Mother's Medical Guide; containing a Description of the Diseases incident to Children; with the mode of Treatment, as far as can be pursued with Safety, independantly of

a professional Attendant. By the late ROBERT BRADFORD: Revised by H. O. BRADFORD, M.R.C.S. London. Hatchard. 1832. pp. 76.

Books of this nature have done so much injury, that we view every fresh one that comes out with regret. That persons, who are supposed by the law to be capable of distinguishing between right and wrong, may have it in their power to dose themselves as much as they please, may be all right, and in accordance with the spirit of English liberty; but it is a monstrous thing, that, unacquainted as they are with the effects of powerful medicines, they should be allowed to administer them to infants and children, without knowing why or wherefore. We have lately pointed out several cases in which the laws relating to the medical profession and to medicine require revision; but surely there is none so immediately demanding attention as the abuse we have just noticed. That an ignorant or malevolent being should have it in his or her power to drench an unfortunate infant with calomel, or laudanum, is most monstrous; and, in all cases, where death or serious consequences occur, the person so acting should be punished with the utmost rigour of the law. It is no uncommon thing to hear fruit-women talking of having given a child two grains of calomel because it was feverish; of course not knowing on what the fever depended. It is notorious, that the good effects of the medicines prescribed by a medical man are frequently prevented, because some busy-body, in the person of a Lord or Lady Bountiful, says, Oh, don't give the child that, it will hurt it; give it some of this or of that, which cured such a body's child; and then the next day the poor little wretch is no better, or it is worse, and the doctor gets blamed, because he could not foresee that an old woman's advice would be taken instead of his! Frequently have we witnessed this in dispensary practice. How often does the medical practitioner see ulceration

and sloughing of the mouth and gums, from the indiscriminate use of calomel, because such a book says, give calomel until the stools are of a natural colour! and the mother or nurse did not know when to stop her hand.

Such being too frequently the case, we view all works, professing to make "medicine easy to the meanest capacity," as calculated materially to injure the prosperity of the country, by destroying its future inhabitants, and to place in the hands of ignorant and foolish people, who are but too willing to use them, the most potent instruments of destruction that can be found.

As to the work itself before us, it is far from fulfilling its promises; the title page undertakes to give "the mode of treatment, as far as can be pursued with safety, independently of a professional attendant," and yet, in the body of the work, we find directions for the treatment (by the *nurse or mother*) of diseases, which occasionally baffle the utmost skill and attention of the medical man. It alludes to small pox, and directs the attendance of the medical man only in the confluent variety. It also gives the treatment of measles, scarlet fever, whooping cough, the thrush, hydrocephalus, scrofula, rickets, ruptures, inflammation of the eyes, *cum multis aliis*. Now these are evidently diseases, which it would be almost fatal for the parents to tamper with, and yet here are directions how to treat all, each, and every, of these affections. In the article headed ruptures, we have three kinds mentioned; "*one at the navel*, and another at the groin; male children have also a third species in the purse." To return these, the following explicit directions are given:—"the patient is to be laid on his back, and the swelling is to be pressed gently, inwards and upwards." What is to be effected by pressing upwards in umbilical hernia, we cannot pretend to tell. The treatment in many of the articles is such as cannot cure the diseases;

while in some others, it can only prove effectual in simple cases; and in all, from the reasons stated in the commencement of this paper, the insertion of it is objectionable; besides, from the compass of the work it is impossible to do justice to the subjects treated of; between fifty and sixty disorders, with their treatment, are included within seventy pages! It is hardly possible to credit that two persons have been engaged on this production.

An Appendix is added, in which, among other things, we find that a blister applied on a child is to remain on for *twelve or twenty-four hours*, unless ordered to the contrary, or pain on making water, and stranguary come on. Truly if these directions were followed, we should see numerous cases of sloughing; St. John Long's practice would be nothing to it. Further on we are told how to make a mustard poultice, but there are no directions how to apply it.

From the whole tenor of this review, it must be evident that it is impossible for us to recommend the work on any score.

Observations in Surgery and Pathology; illustrated by Cases, and by the Treatment of some of the most important Surgical Affections. By WILLIAM JAMES CLEMENT, Surgeon. Whittaker, Treacher, and Co.; Highley, London. Watton, Shrewsbury. pp. 230.

IN the monthly series of the *London Medical and Surgical Journal* for October last, in reviewing *Fletcher's Medico-Chirurgical Notes and Illustrations*, we expressed our regret that a work, containing the experience of a talented surgeon, should have been published in a form, and at a price, which necessarily places the work out of the reach of the greater proportion of the medical profession. The book at present under notice is free from these objections, being published at a much smaller expense, and in a more portable and really useful form; still, how-

ever, the getting up of the work itself is not altogether as it should be. The whole matter contained in it might have been printed in half the quantity of pages, its price thus considerably reduced, and consequently it would, as booksellers have lately ascertained, considerably increase the circulation.

This work contains cases selected from the practice of the author, with clinical remarks; the first article, however, is an Essay on Strictures of the Urethra, in which Mr. Clement combats the doctrine promulgated by Sir E. Home and others, that the urethra is muscular.

Whether he has proved his point or not, we shall not say, contenting ourselves with observing, that many celebrated writers, besides our author, have adopted the belief that the urethra is not muscular.

This Essay is followed by several interesting cases of Hernia, which are clearly detailed, and of great importance. After which we find a case of Spina bifida, which terminated fatally; next a case of Aneurism by Anastomosis, in which extirpation was required; one of Lithotomy, in a young girl; and two of Extirpation of tumours, the latter highly interesting, both as regards the operation, and its results. The nature of this Journal prevents us from making extracts.

We heartily recommend this work to the members of the medical profession, as one of great utility and practical advantage.

THE WELBECK DISPENSARY.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I WAS very much surprised on reading your fifteenth Number, at perceiving a letter signed *Νοσολογος*, accusing me of having misnamed a case from the Welbeck Dispensary. Setting aside the opinion of Dr. Sigmond, of which your correspondent

is ignorant, I think it must be evident that if the writer of that letter had properly attended to his lecturer on the practice of physic, he would have known better than to entitle that case one of *hemicrania*. It bears no resemblance to that complaint, as I hope to be enabled to prove by the following quotations from Sauvages and Mason Good, to the satisfaction of even your captious correspondent.

Sauvages, in his *Nosologia*, vol. 2, p. 55, gives the following description of *hemicrania*, which is not, I think, at all applicable to the case I have narrated:—

“*Hemicrania*—*Migraine*. *Clou*.—

Est morbus cujus precipuum symptoma dolor est in alterutro capitis latere, potissimum ad tempora, frontem, juxta oculos, isque vehemens, sæpe periodicus.

“*Differt à cephalæa ex eo quòd ejus sedes non est in encephalo, nec in calvaria parte quæ immediatè cerebrum tegit, sed in sinibus frontali-bus, orbitâ oculorum, ita ut vel oculi globus vehementer afficiatur tractione, lachrymatione, vel æger naris obstructione, coryzâ, similive sinuum frontium læsione laboret ut plurimum, aut in loco, quem clavus aut pollex tegeret, terminetur affectus, quod in cephalæa non accidit.*”

Will your correspondent point out in the case to which he alludes, the *lachrymation*, *obstruction* of the nares, or the circumscribed pain which a *nail* or the *thumb* might cover? Or in this description of Sauvages can he find the pain shooting in various directions, which was present in Johnson's case?

Besides that, the term *hemicrania* indicates a symptom rather than a disease; it is one of the most indefinite phrases ever used by the physician. Sauvages describes no less than ten varieties; and, indeed, every pain in the head, no matter what causes it, may be called *hemicrania*, so that it affect not the whole head; consequently, the term employed by itself can indicate nothing.

In Good's Study of Medicine,

vol. 4, p. 513, there is the following account of the disease :—

“*Cephalæa Hemicrania. Megrim.*—Pain vehement; confined to the forehead, or one side of the head; often periodical.

“Its seat seems to be chiefly in the integuments of the head; and its principal symptoms are tenderness on pressure, an obscure redness of the skin, and a suffusion of the eyes; and with these there is frequently a nauseating uneasiness at the stomach, but whether as a cause or consequence of hemicrania, it is not easy to determine. * * * * *

“Hemicrania frequently assumes a periodical character, in which case the pain mostly fixes itself on the same side, or the same part of the head. * * * * * In many instances its intermissions are perfectly regular, and the paroxysm returns daily at the hour of noon; yet it is more frequently found in the afternoon than in the morning. So far as I have observed, indeed, it usually takes place in the evening during, or soon after, the digestion of dinner, and in persons of the middle age of life who live temperately.”

Let any one compare the description of hemicrania by Sauvages and Good, with the case from the Welbeck, and he will at once be satisfied that it is not that disease.

Mason Good, vol. 4, p. 291, when speaking of tic douloureux, says, that “the character of the pain is very peculiar, and its course corresponds exactly with that of the nerves.” In the next page we find a statement that will serve, in some measure, as an apology for your correspondent. The disease (tic douloureux,) has been occasionally mistaken for rheumatism, *hemicrania*, and tooth-ache; yet the brevity of the paroxysm, the lancinating pungency of the pang, the absence of all intumescence or inflammation, the comparative shallowness instead of depth of its seat, and its invariable divarication in the course of the facial nerves, or their offsets, will always be sufficient to

distinguish it from every other kind of pain.”

The description in Sauvage’s work of facial neuralgia is rather vague; indeed it does not appear to have been understood by the authors of his time. He gives a formidable case, copied from Andrés’ work, *Observations sur les Maladies de l’Urethre*, 1756, (2nd, 3rd, p. 343,) cured by cautery. Sauvages himself makes mention of the disease under the head, *Nystagmus catarrhalis, tic douloureux de l’œil*.

‘Constitit in doloribus spasmodicis fugacibus, quorum paroxysmi tres vel quatuor horas durabant, periodici, recurrentes, ut in febris intermittentibus, et ter circiter in die repententes; dolores erant lancinantes in globo oculi, infra et supra orbitam.’
—What can be a clearer case?

I have the honour to be,

Gentlemen,

Your’s obediently,

THE REPORTER AT THE WELBECK.

NEW METHOD OF VESICATION.—M. Pigeaux proposes to dip a piece of linen, the size of the blister required, in alcohol, and then having dried it slightly, so that it may be wet without dropping, it is to be applied to the skin, and a lighted match passed over the surface, the spirit fires, but the linen is not ignited, if there is not a current of air playing on it. To avoid burning the linen, the flame should arise perpendicularly; and therefore the parts around should be covered with a wet rag. It is extinguished in a quarter of a minute. One application destroys the epidermis, and detaches it, and two or more will form an eschar on the dermis. M. Pigeaux tried this first on himself. *Bull. Gen. de Therapeutique*.

THE

London Medical & Surgical Journal.*London, Saturday, May 26, 1832.*

THE ANATOMY BILL.

IN common with the public in general, we presume that the medical community has, of late, taken very little interest in any proceeding of Parliament, save in that all important one which has given rise to so great a degree of national excitement. It will, most likely, then be to many of our readers a novelty to hear that the Anatomy Bill has passed the Commons, and is now in the Upper House, destined to undergo, after a short interval perhaps, the ordeal of a scrutiny by their Lordships. This, therefore, is the time when the provisions of the Bill should be thoroughly considered by the profession at large; and this is the season when the medical press, by temperate and impartial discussion upon it, may, to a very important extent, promote the best interests of science.

The Bill, with all the changes which it has undergone, up to the moment of its being transferred to the House of Lords, now lies before us. We have considered it attentively, and it would be disingenuous in us were we to hesitate in expressing what we so strongly feel, namely, the conviction that the Bill, if passed into a law, in its present shape, will be quite inoperative as to any good purpose, and will be only a source of

perpetual annoyance to those on whom the responsible duties of affording a good medical education devolve. So far from arraigning the motives of the authors of this measure, we would rather recommend them to the applause of the profession. But, surely, it is not inconsistent in us to praise the intentions, at the same time that we condemn the practice of those who, with every desire to serve us, have mistakenly used their efforts only to our prejudice. Such are the conclusions to which we have come, after a deliberate perusal of this Bill; such are the conclusions which, by a specific reference to its provisions, we think we shall be able fully to justify.

The apparent object of the Anatomical Bill is, as it really should be, to furnish facilities for the study of Anatomy. Let us see how this object is proposed to be accomplished in the measure before us. The first clause relating to this subject, authorizes any person having the custody of a body, except he has it for interment, to permit it to undergo anatomical examination. Now this seems very liberal to the anatomists, but unfortunately the permission is clogged with two very formidable conditions—the first is, that the deceased has never, by writing during his life, or by word of mouth in the presence of two witnesses during the illness whereof he died—expressed his desire that his body after his death should not undergo such examination. This is tolerably fair, and might in practice, work usefully for science; but it is

altogether superseded by the second condition which follows, and by which it is enacted, that if the husband, the wife, or some near relative of the deceased, object, *no anatomical examination can take place at all!* But the Bill does not stop here, for, even though a party should expressly bequeath his body to the service of anatomical science, this Bill gives to the near relatives, or any of them, the power of annulling the legacy, and of interring the body without the anatomical examination which the deceased, in his last illness, had expressly commanded! In what respect then, we ask, will the Bill effect a change for the better thus far? What are the difficulties to be surmounted at the present moment in the procuring of bodies? Why, the reluctance of relations and friends to give them up. Every practitioner must have experienced the truth of this assertion. How often does it happen that patients make arrangements for the examination of their bodies after death, or for the consignment to their favourite surgeon of a limb, or other part, affected by a new or rare disease, and yet how seldom is it that the relations or friends are content to carry such arrangements into effect! In the highest and the lowest grades of society, we find the influence of relatives and friends an uniform and almost always a successful obstacle to all medical interference with the remains of a deceased person; and the authors of the Bill before us, in recognizing and confirming that in-

fluence, seem to us to have left the facilities for the study of Anatomy in an infinitely worse condition than they found them.

Much as we were prepared for disappointment and vexation, after having become acquainted with the above specimen of the Anatomy Bill, we really must admit that our astonishment was more than ever excited when we cast our eyes upon the succeeding clause. By this memorable clause it is enacted, that the body of a deceased person, which is destined for anatomical examination, shall not be removed for such a purpose until the following conditions are complied with:—1st, forty-eight hours must have elapsed from the moment of decease; 2ndly, twenty-four hours notice from the same date must be given to the Inspector, of the intended removal of the body; and lastly, a certificate, must be signed by the medical man who attended the deceased in his last illness, stating in what manner such person came by his death. The framers of the Bill having, it seems, imagined it to be just possible that a last illness, or the attendance of a medical man, might not on all occasions precede the extinction of life in a human being, bethought them, in their wisdom, that some expedient should be provided in case of such a casualty as this. And what was the sagacious contrivance found out for the occasion?—It was no less than this, that “some physician or surgeon, or apothecary, should be called in to view the body, and state the *manner or cause of death* (!) to the best of his

knowledge and belief, but who shall *not be concerned* in the examination of the body *after removal*!!”

Now, if it were permitted to young legislators occasionally to amuse each other by gravely burlesquing the functions of Members of Parliament, we could then see our way towards attempting to explain the source of such fantastic proposals as those of which the clause just recited is a favourable specimen. But as matters go on, at present, we are altogether at a loss for a clue to the great mystery of legislative folly. What, in the name of all that is wonderful, is the reason, that the medical man who views the body, and guesses at the cause of death, should not be allowed afterwards to be concerned in the examination? Does Mr. Warburton mean, in point of fact, to puzzle the doctor by a “*view*” of the body, and then deprive him for ever of the opportunity of getting rid of his doubts?

And then how ridiculous the notion, that a bare “*view*” of the body will be sufficient to justify a medical man in declaring the cause or manner of death. Are these gentlemen in their senses? Do they believe in witchcraft or second sight, that they suppose a physician can tell the contents of the stomach by looking at the abdomen of a dead man; or detect the bursting of an aneurism of the aorta by fixing his eyes on the cold integuments of the thorax? What vulgar prejudice, what wild superstition of the dark ages is it that the authors of this Bill are haunted by, when, in the first place, they endow a medical

man with a preternatural power of finding out diseases; and when, in the next place, they treat the compulsory exercise of this very power as a sort of contamination to which they themselves have assigned a specific penalty? A penalty, we repeat, it is, that a scientific man who views a dead body should be prohibited from witnessing the examination of it afterwards. This strange clause involves some suspicion of the medical character, and requires explanation.

What do our readers now think of the new “*facilities*” for anatomical amination? We have not done, however, yet. We have stated that the Bill, along with being inoperative for any good purpose, was also calculated to annoy, if not injure, the profession. Knowing of old the value of a demonstration, we cannot hesitate to give one from the Bill in support of our assertion.

“It is not lawful” (we quote from a subsequent clause) “it is not lawful for any party to *carry on or teach anatomy* at any place, or at any place to receive or possess a body, &c. unless a week’s notice be given to the Secretary of State.” Now, we speak advisedly when we say, that the effect of this clause (should the Bill pass) will be to impose upon every medical man in the empire, who has an apprentice, the necessity of giving notice to the Secretary of State. Let it be observed, that this notice must be given by any party who *carries on or teaches anatomy*. Thus, then, it will necessarily follow, that the master who merely goes over the bones with

his pupil, does an unlawful thing. And what is an unlawful thing, according to the definition of this very Bill? Merely a misdemeanour which, being proved, subjects the offender to a fine not over 50 pounds, or to an imprisonment not longer than three months! We shall say no more for the present: but we trust that the framers of this Bill will be made to understand, in as short a time as possible, that the sooner they withdraw it utterly from the sight of the public, the sooner do they stand a chance of recovering a character for common sense and common intelligence.

ST BARTHOLOMEW'S HOSPITAL DINNER.

It was not our intention to have alluded to the coarse and unwarrantable misrepresentation which was published in the *Lancet* of last week, of the proceedings at the recent annual dinner of the gentlemen connected with St. Bartholomew's Hospital. We have, however, received so many proofs of the indignation which that extraordinary perversion of the truth has excited, that we feel compelled to notice the subject. Of the letters sent to us we give a specimen, and we have selected it principally for its comparative moderation.

We enter into no explanations, no counter-statements, no denials. There is enough in one or two preliminary circumstances connected with the article in the *Lancet*, to provoke bitter reflection, and to challenge complaint. Let us ask, for example,

how it is that festivities amongst political unions, amongst the reformers of the State, amongst the votaries of election by ballot, should be deemed so wise, so laudable, so essential to a spirit of harmony amongst numbers, by that self-same authority which reprobates the social communion, at stated intervals, of such a body of men as that composed of the recent and existing attendants on a large Hospital? Nay, it is within our recollection, that when a member of our profession earned the applause of his brethren, by the establishment of a legal principle useful to the medical community, the very authority to which we allude suggested and urged a dinner, as a compliment quite appropriate to the nature of the service rendered by Mr. Handy.

Shall we tell the reason why this strange distinction should be attempted in the *Lancet*? Shall we say that the concord and mutual good understanding of hospital surgeons counteract altogether the policy of the *Lancet*? Shall we declare it to be our conviction that the whole of the article in question can be traced, although by very delicate filaments indeed, to an ingenious plan for maintaining perpetual discord, distrust, and jealousy amongst those men whom a sense of justice and duty ought to combine in a common cause?

But who were the individuals selected for the cruel experiment on this occasion? They were the ancient objects of hostility to him who is still their relentless adversary.

Years upon years have rolled by since Mr. EARLE and the editor of the *Lancet* were committed in angry discussion. Years have passed away, too, since the same editor was enabled to avail himself of the unwarranted conclusions of a feeble-minded jury, and to charge Mr. Stanley with the crime of ignorance of his professional duties. With most men we should say, that the progress of so many years would have swept all resentment from the mind, or would, at least, have mellowed those feelings of hostility, which it was impossible to eradicate, into something like indulgence and forbearance. But there are beings, it seems, in the human shape, who embalm their hatreds—who would purchase, if they could, all the spices of Arabia to give longevity to their personal dislikes.

Of the worst character of antiquity it is said by a Roman historian, that he treasured up his animosities as he would a precious fund; and that when, subsequently drawn forth, instead of being diminished, they were found to be only increased by the lapse of time. How many a Nero (for such was the historian's subject) goes down to an obscure grave for want of that ample opportunity which is necessary to give scope to the development of all his execrable instincts!

DEATH OF PROFESSOR DUNCAN.

THE scientific world has to deplore the death of one of the most learned, zealous, and able Professors of this

country, by the demise of Dr. Duncan of Edinburgh. The learning, ability, and research evinced by him as Editor of the *Edinburgh Medical and Surgical Journal*, for the last thirty years, were esteemed and acknowledged throughout the civilized world.

There are many candidates for the vacant professorship; but Professor Christison, we imagine, ought to be preferred.

Hospital Reports.

ST. BARTHOLOMEW'S HOSPITAL.

EPIDEMIC CHOLERA.—DEATH.

A MAN, aged 48 years, was admitted into the cholera ward attached to St. Bartholomew's Hospital, on Thursday, 17th instant, at eleven, a.m. under the care of Dr. Burrows. It was stated, that for several days he had altogether abstained from food, and had been in a state of continual intoxication, produced by large quantities of gin and beer; he had had a diarrhoea for many days. On this day neither the looseness of his bowels nor the vomitings formed prominent characters of his disease. The matter ejected from his stomach was of a bilious character; his eyes were sunk, his countenance livid; the tips of his ears, fingers, and all other parts distant from the centre of the circulation, were cold and of a purple colour. The pulse could not be felt at all in the wrists or carotids, but in the femoral artery there was a slight pulsation; the heart acted with difficulty; his tongue was moist but purplish; he was at intervals seized with cramps of his whole body, and turned incessantly in bed. *Treatment*; he was bled to ten ounces, the blood was exceedingly dark, but upon standing was neither cupped or buffy; the following draught was administered—

R *Sp. ammoniæ comp.* ʒi.
Tinct. opii. ʒss.
Aqua. menthe. p. ʒiiss.

He was covered with numerous blankets and the hot air bath applied; sinapisms were put upon his epigastrium and chest; and a drink composed of a pint of liquor calcis, with fifteen grains of carbonate of ammoniæ, was administered at intervals; of this he took two doses, and expired at five p. m. without any symptoms of re-action.

Autopsy.—The most remarkable morbid appearances were the fluidity and dark colour of the blood, with a copious effusion of seriform fluid between the arachnoid membrane and pia mater.

The students were not allowed to be present at the dissection, and for what reason I cannot imagine, unless from the danger of contagion or human combustion, which might be supposed to arise from a body destroyed by the heterogeneous influence of long continued potations of gin, beer, and the imbibition of genuine Asiatic or malignant cholera.

GREVILLE STREET HOSPITAL.

MELANOSIS OF THE THIGH.—OPERATION.—CURE.

RICHARD COTTER, ætat. 50, was admitted into this Hospital, May 1st, with a large tumour on the thigh, situated immediately over the insertion of the tensor vaginæ femoris muscle, extending from that point, externally as far as the insertion of the elutaus maximus, and internally to the inner border of the sartorius. The tumor had no perceptible pulsation, although the man described it as frequently beating like a clock. He said he had received an injury on the back from a fall. An abscess afterwards formed in the groin, which burst, and discharged itself through a small opening for a considerable time, after which the tumor, which had been of long standing, as a small knob, rapidly increased. There was pain and diffi-

culty in walking; and pressure on the trochanter gave great pain in the joint. The tumor was extirpated by Mr. Greville Jones.

On examining the tumor the following appearances were observed:—*Externally*, the skin was dark-coloured in the numerous varicose veins; *internally*, the structure consisted of a series of adipose lobules, in the centre of which was a melanosis. Much more skin was removed than is usual, under an impression that the integuments were diseased. Nor was there any union by the first intention attempted, the operator considering, that to keep open an extensive suppurating surface would be the best means of removing the disease in the joint.

The man has recovered a high degree of strength since the operation, and the affection of the joint is evidently amended.

May 15th.

DINNER AT ST. BARTHOLOMEW'S HOSPITAL.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I have no doubt, from the strict impartiality and honourable independence with which your excellent and leading periodical is conducted, that you will allow me a small portion of your truly valuable pages in defence, and reply to the vulgar and malevolent attack made on Mr. Stanley and Mr. Earle, in the last number of the dying *Lancet*. The account of the speeches given in the leading article of that unprincipled vehicle of slander, is distorted and entirely unworthy of credit. The Billingsgate abuse of a Lawrence, an Earle, and a Stanley, and without any cause, save to satiate the morbid taste of the writer, requires no comment. It shews the consistency of a Journal which had so recently attacked yours for defaming the whole medical character of the country. But scandal has long fed the defamers of the

medical profession, and will be agreeable to all those whom fortune has frowned on, and who envy every one to whom she has been kind. Never was there a more unjust attack than that to which I allude; nor was there less cause for censure of a convivial meeting. I am, Gentlemen,

Your constant reader,

A PUPIL OF ST BARTHOLOMEW'S
HOSPITAL.

May 18th, 1832.

EXTRAORDINARY CASE OF SPINAL
DEFORMITY SUCCESSFULLY TREATED.

To the curious, who are desirous to see the success of medical treatment exemplified in a case of unparalleled deformity affecting the back and limbs,—the medical faculty, and all who take an interest in the advancement of a science, necessary to the happiness of mankind, are informed, that Sally Hawkes, a pauper, the most mis-shapen and helpless person ever seen, has, in the course of a few months, been restored to good health, to her natural figure, and the free use of her limbs. In order to remove doubts, and gratify the inquisitive on a subject so interesting to humanity, a medical gentleman, perfectly acquainted with the circumstances, will attend at her lodgings, No. 6, Meard's Street, Dean Street, June the 9th, and for a few weeks every following Saturday, from four to five, p. m., to explain the means employed for her recovery, and to shew that they are founded in a correct view of spinal pathology. As it may be more agreeable to the ladies to visit Sally Hawkes on other days, the gentleman referred to will give his attendance to them June the 4th, and for a few times, at the same place and hour, every Monday afternoon.

[The object of the humane writer of the above statement is to benefit a young female, who presented, perhaps, the most extraordinary instance of deformity ever recorded, which was seen by Sir Astley Cooper, and

many other eminent surgeons. We can add our testimony in support of the truth of this statement; and cannot but acknowledge our surprise at the great improvement, indeed we may say perfect cure, effected by judicious management. Faithful drawings of the case were made in the presence of many practitioners; and we hope, ere long, will be submitted to the profession, with the history of the symptoms and treatment.—Eds.]

LITERARY INTELLIGENCE.

MR. THACKRAH, of Leeds, is preparing a new and enlarged edition of his work on *Employments as affecting Health and Longevity*, extending the subject of his enquiry to the general Arts, Trades, and Professions of England. His first Treatise had a particular reference to the employments of a clothing district only.

Observations on the General Principles and on the Particular Nature and Treatment of various Species of Inflammation. By J. H. JAMES, Surgeon to the Devon and Exeter Hospital, and Consulting Surgeon to the Exeter Dispensary.—Renshaw and Rush.

This work is executed in an able manner. It is most decidedly the best elementary work on the important subject of inflammation, in the English language.

We have received a Letter from Dr. Seeds, complaining that his formulæ were not given accurately in Mr. Guthrie's Lecture in our last. We inserted the prescriptions as given by the learned Lecturer, and we of course could not think of changing his language. Dr. Seeds say his formulæ is the following:—*R. Sp. æther. sulph. comp. ʒj.; sp. am. aromat ʒj.; sp. vini. camph. ʒj.*

A highly respectable Medical Practitioner of 25 years experience in his profession, and now in respectable practice, is, from circumstances, over which he could have no controul, with a numerous family, suddenly involved in difficulties he cannot surmount, and without timely aid, must in a few days be inevitably ruined, his practice be lost to him; and his unhappy family doomed to penury and want. Under such distressing circumstances, and by the advice of some truly humane and respectable friends, he thus presumes to intreat the commiseration of the charitable and more wealthy of his fellow creatures, to raise, by subscription, a small sum to save him from the certain destruction that hourly awaits him; trusting that a humane Public will not suffer an industrious but unfortunate Father, and his numerous Family, to sink into oblivion, through unmerited misfortune.

(We can testify to the truth of this statement.)

THE

London Medical and Surgical Journal.

No. 18.

SATURDAY, JUNE 2, 1832.

VOL. I.

SELECTIONS

FROM THE

CLINICAL LECTURES,

DELIVERED AT THE

HOTEL-DIEU IN PARIS,

During the Session of 1831-32;

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

On Fractures of the Neck of the Thigh-bone; their Causes, and Treatment.

FRACTURES of the neck of the femur have of late fixed the attention of surgeons, and are now as well understood as those of other parts of the bones of the inferior extremity. Several cases admitted into the Hotel-Dieu during the last winter, have enabled me to develop some new and important practical considerations.

If we examine the ages of the different individuals who were lately admitted into this hospital with fractures of the neck of the thigh-bone, we shall observe, that in general they passed fifty years, and that there are no infants, and very few adults. But in both sexes fractures are more common after sixty years of age. You will know the difference between the predisposing and efficient causes. I have never observed such fractures of the neck in infants, and very rarely in young persons. Sabatier has detailed a case, in the transactions of the ancient Academy of Medicine, of a boy of fifteen years of age, who had fracture of the neck of the femur. These fractures are more common about the age of fifty or sixty, and most frequently observed between seventy and eighty.

It is impossible that there does not exist some cause for this difference of frequency in the different epochs of life. This cause is certain, positive, and known, and resides in the anatomical disposition of parts, which is not the same in the different ages of both

sexes, or in certain circumstances, temporary or permanent.

The neck of the femur has not the same direction at all ages. This disposition should be known. In the early age the axis of the neck approaches to that of the shaft of the femur; the angle which it forms with this part is as obtuse as possible. The great trochanter makes but a very slight prominence, and we remark that falls upon this part are the ordinary cause of fracture of the neck, and that this injury is of more frequent occurrence in proportion to the prominence of the great trochanter. We know that this trochanter very slightly projects with infants, and therefore that falls upon this part are less frequently followed by fracture.

Another anatomical disposition renders such fracture still more difficult. The shorter the bone, the less the right angle with the body, and consequently, the more it approaches the axis of the femur, the causes of fracture are less likely to affect the neck, and the efforts which tend to rupture its fibres, whether acting from below upwards, or from above downwards, as in falls on the feet, knees, or great trochanter, have scarcely any action upon it. These efforts are all directed towards the head, and not towards the neck, because it is not developed.

There is a great reason for the rarity of fractures in early age, and that is, the great flexibility of the osseous tissue by the abundance of organic matter in bone. This can be demonstrated very easily; for if we suspend a weight to such bones they bend, while the same would fracture the bones of old persons. Finally, if we join to all these causes the smallness of the pelvis in infants, and the abundance of cellular greasy tissue, we have all the anatomical dispositions which render almost impossible fractures of the neck of the femur with infants and young persons of both sexes.

In the adult age fracture of the neck is rare, but more frequent than in infants; the saline is accumulated in the bone, but does not predominate as in old age. The neck

presents a different disposition, it is much longer, and the angle which it makes with the body is better marked than in the infant; there results a great prominence of the trochanter, and therefore more probability that falls will produce fracture. But this length of the neck, and this prominence of the trochanter, differ much at this age in different individuals, and according to the sexes. It is more prominent with women, and hence the greater frequency of fracture with them. The size and strength of the muscles which surround the hip joint, better withstand falls in the male, and render fractures rarer; but these are more frequent with women at the adult age, from the size of the pelvis, the length of the neck of the bone, and the size of the trochanter. The quantity of fat in the hip of the female, which is greater than in the male, serves, in some measure, the office of the stronger muscles with him in opposing the effects of falls. But when either is emaciated, the woman is more subject to the fracture under consideration than the male.

In old persons the pelvis has acquired its full size, the great trochanter is most prominent, the neck of the femur is longest, and inclined to a right angle; the bone has lost its organic matter, is smaller than in the adult, is filled with saline matter, and is more friable. The absence of the cellular tissue, the flaccidity and atrophy of the muscles which surround the hip, explain the frequency of fracture of the neck at this period of life.

I also consider that women advanced in life are more liable to this injury than men. If we examine them attentively, we shall find that the neck is longest, the trochanter is most prominent, and the friability of the osseous tissue is greatest. With these, too, the emaciation is considerable, and therefore there results a number of anatomical circumstances which favour fracture of the neck of the femur more considerably in the female than in man.

This fact is easily verified: in visiting hospitals for aged persons, we find more fractures of the neck of the bone in women than in men. At the Salpêtrière, for example, the refuge for aged women, we find more fractures of the neck than at the Bicêtre, the asylum for old men.

These considerations enable us to form a correct theory of this fracture, and likewise a more correct treatment; for in infants union will be effected in three weeks or a month; it will require longer time in the adult; but in the old it will take one hundred or one hundred and twenty days to effect consolidation.

If we rapidly recapitulate what I have considered the predisposing causes of this fracture, we shall see that brevity of the femoral neck, the large opening of its angle with the body, the defect of the great trochanter, the flexibility of the osseous tissue, the abund-

ance of the greasy cellular tissue, render almost, if not quite impossible, fracture of the neck of the femur in infants. In the female, on the contrary, the length of the neck, its angle more considerable, the greater prominence of the trochanter, explain the greater frequency of this injury with her than with man, in whom the neck is shorter, and the trochanter less prominent. The quantity of the cellular substance around the hips of both sexes diminishes the danger of this fracture. These considerations have led Sir Astley Cooper to say that fracture of the neck was rare before the fiftieth year. Nevertheless there are many exceptions to this rule. But if this fracture is rare in infants, more common in adults, its frequency is very remarkable in old persons, on account of the tenuity and atrophy of the muscles, the diminution of the cellular tissue, the largeness of the pelvis, the length of the neck, its angle with the body nearly right, and the projection of the great trochanter. There are still other circumstances that predispose to this fracture, the friability of the osseous tissue by rachitic and cancerous affections.

What are the efficient causes of this fracture? Almost all the patients have answered that a fall on the great trochanter, in consequence of tumbling on the side without being able to advance the arm before the hip. The frequency of this cause is known to all authors. Thus in thirty-six cases of this fracture noticed by Dessault in a certain period of time, twenty-four were caused by falls on the great trochanter; and in children and young persons, who are preserved from this injury by the anatomical circumstances already mentioned, the epiphysis was broken off. It is also advisable to notice whether there is an ecchymosis, which will prove the site of the contusion. I have examined a woman this morning, who gave no answer to my questions; but the existence of ecchymosis, and the rotation of the limb soon explained the nature of her injury.

There are other causes of this fracture, such as falling on the soles of the feet, the hams being extended, or on the knees; but in either case the muscles must be extended and inflexible. Sir Astley Cooper has observed in London, that fracture is produced by false steps on the pavement. In such cases the head of the femur strikes the acetabulum with great force, and there results an effort which tends to diminish the opening of the angle which the neck makes with the body of the femur. If this angular union of the femur with its neck has the advantage of increasing transversely the base of support; and to give more solidity to position, it singularly favours the production of these fractures; in fact, in a fall on the feet, the weight of the body, augmented by the fall, is directed against the head of the thigh bone, and tends to push it upwards; then by the resistance of the neck the great trochanter is

forced towards the crest of the ilium; these two effects in an inverse sense on the two branches of a lever cause the fracture, which commences in the superior fibres of the neck, and then extends to the inferior. I have often observed, as I shall state hereafter, the fracture of the acetabulum by the pressure of the head of the femur.

The mechanism which I have described is not that by which fracture of the neck usually occurs; on the contrary, it is by a fall on the hip that this accident is produced. In this case the neck is placed between two weights opposed, which act obliquely to the axis of the body, and therefore produce a fracture in this direction; in fact, in a fall on the hip, on one side, the head is pressed by the weight of the body; on the other, the great trochanter is pressed on by the solid substance which strikes it; these two parts tend to elongate themselves, the neck to relieve itself, and it is at this moment of relieving of the angle formed by the head that the fracture occurs. In this case, the head itself is sometimes broken, sometimes the fracture takes place near the great trochanter or neck, in the vicinal part of this tuberosity, sometimes under, at the superior part of the body of the femur, but most frequently immediately under the head at the superior and internal part of the neck.

Are these the only causes of fracture of the neck? Certainly not, it may occur from simple muscular action. It has happened to a young negro affected with tetanic contractions. In such a case, the direction of the fracture is the same as when it happens from a fall on the soles of the feet or on the knees.

This fracture may also happen by direct causes. These are projectiles, as a grape or musket ball, and I have seen many such cases in the month of July, at St. Cloud. The ball which effected the fracture passed in, but not out, as its impulsion was impeded by the thickness of the osseous tissue and muscles round the hip. There were many cases in which the ball could not be extracted but with much difficulty, and consequently the fractures did not unite for a long time. We can distinguish those cases produced by direct causes from the former, by the aperture through which the ball entered, the comminuted fracture, the fragments, purulent collections, the symptoms of resorption, and the rarity of the consolidation. In recapitulation, I say, the efficient causes of fracture of the neck of the thigh-bone may be placed in the following order: 1, falls on the great trochanter; 2, the direct causes; 3, falls on the soles of the feet or knees; and 4, muscular action. I shall describe the diagnosis and treatment of this injury at our next meeting.

MR. HETLING'S
SURGICAL LECTURES
AT THE
BRISTOL INFIRMARY.

Session 1831-32.

INTRODUCTORY LECTURE.

(Continued from page 423.)

INTRODUCTORY LECTURE—(continued.)

I SHALL now proceed to make a few more observations on the duties and attendance of hospital practice.

I conceive that the principal obligations and duties of a hospital surgeon are reducible to two objects.

1st. *The benefit of the poor who are confided to his care.*

2nd. *The instruction of pupils.*

With respect to the first of these duties, I have endeavoured, to the best of my ability, unremittingly to discharge it ever since I entered upon my office. In the course of the regular performance of this duty, you have had frequent opportunities of obtaining surgical information during your daily attendance in this hospital; but it must be obvious to you, as well as to myself, that it has not been to that extent the subject is capable of. It must be evident that the bedside of a patient is not a fit place to convey instruction; and our perambulations through the wards will not admit of anything approaching towards a regular education.

Public hospitals in themselves cannot, it is obvious, create knowledge; they can only afford desirable opportunities for study and practice to those who are disposed to attend them; and it must still be from individual exertion that improvement will spring. The experience afforded in a hospital tends to keep down that luxuriance of plausible theories, which so very much disfigures the pages of several surgical works even of the present day. Many such have been received at first with great approbation; but the man of experience, who has the opportunity of comparing them with what nature exhibits in a hospital, has detected the visionary and oftentimes the pernicious doctrines they attempt to inculcate.

It will be an object with me to make the practice of surgery interesting to you; and that you may not be left to learn the principles of your art in the hurried and rapid manner which the daily attendance on every hospital can only afford, I wish you to reason on the cases that may offer themselves to your notice, and to deduce from the result of them those principles which shall guide your future conduct and give you confidence, that your

practice may not be confused and unmeaning.

My purpose is to excite you to diligence; to represent your profession as requiring and deserving by its importance your continued study; to remind you how much is still due to the improvement of your mind and talents during the preliminary education you are receiving.

I will endeavour to instruct you in all the daily duties of an hospital, and those are always the most essential. If the directions which I shall lay down should enable you to go your rounds in the hospital with a quicker eye and clearer understanding of the cases that are committed to your care, and a more perfect command of the ordinary remedies, I shall be very highly gratified with this discharge of my duty.

In hospital practice you will every day see some point illustrated, some doctrine confirmed, or some rule of practice established; at the same time almost every occurrence will serve to deepen the impression of those ideas, it will be my constant endeavour to imprint on your minds.

In hospital, and even in private practice, you will seldom have the opportunity of noticing diseases in their first stages; to repair the defect that may hence arise, it will be very necessary to form in your mind a correct knowledge of the earliest characteristic symptoms of every disease.

In your attendance on an hospital, avoid the too common practice of merely walking through the wards to glance at the most prominent cases; rather go to the bedside and enquire diligently into the history, symptoms, progress and circumstances of the complaints, and into the effects of the remedies employed for their relief. Of all the more important particulars take regular and accurate notes. Do not trust too much to memory—memory is a good faculty, but it will be nothing the better for being too much confided in. Sensible impressions fade if they are not often repeated, or revived by proper memoranda. Amongst the extensive range of patients, select the most interesting for your own observation. A few such cases strictly attended to will advance your knowledge in a far greater degree than a hasty gleaning from the wide field which every hospital affords. Thus you will acquire the habit of accurate information, without which opportunities will avail but little. A man may know very little of the nature of a disease, though he has repeatedly seen it; for seeing is not observing, although it is essential to it.

Among the thousands who see the flowers of the field, how few know the parts of which any one is composed, or could give an intelligible description of them? Not from any difficulty in the object, or want of capacity in themselves, but merely for want of observation. So it is with diseases. Their phenomena will not enter the mind by mere intuition; they

must be marked, distinguished, and compared. To some this task will be easier than to others, but it is nevertheless essential to all.

I would also recommend you to accustom yourselves, as far as a proper consideration for a suffering patient will permit, to pay particular attention to the feel of parts under various circumstances of disease, that you may acquire what has been called the *tactus eruditus*, and thus be able to discriminate one species of tumour from another; for instance, an abscess, or an enlarged gland in the groin, from hernia, and other diseases of that part.

The science of surgery, it has been well observed by the late Mr. John Pearson, "like any other branch of natural knowledge, is not the production of a vigorous imagination, nor a lively invention, but it is the offspring of a long and diligent experience; and if a man attempts to learn it in any other way, than by going from his study to the bedside of his patient, and returning from thence to his study again, he will find himself mistaken. The human mind may be dazzled by the boldness of her flights, or wounded by the keenness of her speculations, but the subtilty of nature can only be penetrated by those who submit to become her patient and vigilant servants."

I design occasionally to introduce *clinical observations* on those surgical patients that may be admitted under my care, whose cases are either intricate or particularly interesting. This will afford you solid instruction, as you will see the effects of the method of treatment that is adopted in the course of the disease; you will also thence contract a habit of observing facts, and consequently feel an aversion to all reasoning that is not conformable to them. Another advantage will be, that complete collections of observations on the cases treated will be kept, and from their comparison the most certain rules for the treatment of similar complaints may be drawn.

Clinical lectures are to the practice of surgery what *dissection is to anatomy*; it is *demonstration*. He who engages in practice without this species of instruction, must be supposed to know diseases only by description; and when the fallacious appearances and changeful forms which diseases assume are considered, it is really to be apprehended that consequences too unpleasant to dwell on must then succeed. He, on the contrary, who has thus had diseases placed before him, their various shades of difference pointed out, and their peculiar cast and character rendered familiar to him, will approach his patient with satisfaction and success.

The clinical lecturer ought to possess many requisites both of tact and discrimination, which can only be acquired by a long and regular attendance on clinical practice. For some years past the impulse to deliver clinical lectures at our great hospitals has been gradually increasing; and the great wonder

is, that the example of the royal infirmary of Edinburgh did not long ago render the measure universal. Most of you, no doubt, have lately read the interesting and attracting clinical lectures now so ably delivered in London by Dr. Elliotson at St. Thomas's Hospital, on medical, and by Mr. Henry Earle at St. Bartholomew's, on surgical cases. I recommend the perusal of them to your particular attention.

The practice of taking notes from lectures is of clear and decided utility; and every student ought to make it a point to keep correct and complete notes of one course of lectures, on each department of medical science. But it will be seldom advisable to take notes of a first course, where two or more of the same kind are to be attended, in order that the mind may, in the first instance, be wholly devoted to following and comprehending the lecturer. The use of short-hand I consider as every way to be reprobated; it converts the writer into a mere mechanic; it employs him in copying words, instead of digesting and compressing thoughts; and unless he has three or four hours to bestow on the same subject after the lecture, his manuscript remains in a form almost as inconvenient for reference as if it were written in an unknown language.

The taking of notes is exceedingly proper, such as those which are proposed to mark any observations particularly deserving of future attention; or such as, not being understood at the moment, may require revision and comparison with the accounts respecting it given by some respectable author. But perhaps the greatest advantage they afford is the unremitting attention which they necessarily excite, acting as a constant monitor, and preserving the mind from straying, so that nothing material can escape unrecorded. Whilst addressing you on this subject, I cannot refrain from giving you a word or two on a practice that leads a student very soon into habits of negligence and inattention; I allude to the copying of lectures taken by others. This I have reason to suspect is much too frequently adopted. The consideration that the assistance of another's notes can be obtained, will frequently turn the balance wavering between duty and indulgence.

On this subject the late Dr. Mason Good observes—"In your attendance on lectures, I would rather advise you to carry the substance of them away in your head than in your note book; many trust too much to their notes. You will do well to remember, that you cannot consult these memoranda at the bedside of your patient. I would not be understood as entirely discouraging the system of taking notes, but I consider that most students, who attend a course of lectures for the first time, will derive more solid advantage from attention without writing, than writing, as may be done without mental application. The most useful method is to take down the

heads of the lecture only, and to fill them up at home, so as to preserve an authentic record of the most important facts, and to form a general analysis of what he has heard. This has the advantage of keeping up the attention, of giving to the mind a habit of digesting what is presented to it; and lastly, of enabling the student to acquire a facility of expressing his thoughts in writing."

Permit me, additionally, to suggest one hint or two. Never read without your pen or pencil in your hand, and your commonplace book beside you, in which you will enter such passages as strike your mind by their novelty or importance. You are not aware of the great advantage you will derive from constantly committing your observations and thoughts to writing. A person can never ascertain how much he has acquired till he records and arranges his knowledge.

Human, comparative, and morbid anatomy, pathology, physiology, with the other collateral branches of our science, will occupy an accessory place in these lectures, but I shall occasionally introduce them when necessary to illustrate the different action of parts both in health and disease. I shall thus select and transfer from those subjects what may prove useful and explanatory of that science which we have principally in view. I shall also avail myself of every opportunity of exposing to your notice such of those specimens of morbid anatomy, that I may obtain either in my private or public practice, as may tend to elucidate the subject we are discoursing upon. *The examination of the dead body*, in every doubtful or difficult case, is in general an appeal to truth; it establishes the fact we are searching after, and corrects conjecture and theory. Much may be learned in the examination of the dead body, without delicate skill or profound knowledge. A student only possessed of a slight knowledge of anatomy, might soon be qualified to perform many useful inspections of the diseased subject. He would soon be enabled to distinguish between changes which may have some considerable resemblance to each other, and which have been generally confounded. This will ultimately lead to a more attentive observation of symptoms while diseased actions are taking place, and be the means of detecting and distinguishing diseases more accurately. When this has been done, it will be more likely to produce a successful inquiry after a proper method of treatment. The examination of dead bodies, whose cases you may have attended, will afford you solid instruction. For cases having a fatal issue are often not less instructive than such as terminate favourably. They frequently tend to point out more accurately the plan to be pursued in the treatment of similar complaints; they afford valuable information relative to the probable causes of failure, and when an examination is permitted, they throw light on the more intimate nature and modifications of the disease.

In addition to this mode of acquiring a knowledge of disease, I must on no account forget to mention the advantage of embracing every opportunity to examine morbid parts, after they are removed by operation. For many diseases consist in a real alteration of the structure, the nature of which can only be fully detected by anatomical investigation.

I shall likewise introduce morbid parts preserved in spirits; others in a dried state, with casts of any rare or curious disease I may obtain; additionally I shall illustrate the subjects treated on by plans and drawings, a mode of teaching sometimes exceedingly useful in connecting the two departments of surgery and anatomy, by demonstrating what otherwise could not be obtained, and which, by reviving the recollection of our past studies, will enable us to understand the subject immediately under review.

THE
ANATOMICAL EXERCITATIONS
OF

WILLIAM HARVEY, M.D.

(*Continued from page 526.*)

To the most Serene and Invincible Monarch,
CHARLES, King of Great Britain, France,
and Ireland, Defender of the Faith.

Most Serene King,

THE heart of animals is the foundation of life, the prince of all, the sun of their microcosm, on which all vegetation depends, from which all vigour and strength emanate. The king is likewise the foundation of his kingdoms, the sun of his microcosm, the heart of his commonwealth, from which all power and mercy proceed. The things which are here written on the motion of the heart, I am bold enough to offer to your Majesty (as is the custom of this age), the more because, according to the example of man, as all corporal actions are in accordance with the heart, so all public matters are in accordance with the king. The knowledge of his own heart is not useless to a king, as being a divine example of his actions (thus was I accustomed to compare great things with small). You are able at least, best of kings, placed at the summit of human affairs, to contemplate at once the structure and principle of the human body, and the image of your royal power. Accept, therefore, I most humbly beseech, most gracious King, with your usual benignity and clemency, these new things concerning the heart, you who are the new splendour and entire heart of this age, a Prince abounding in virtue and mercy, to whom we justly refer whatever is received, whatever good England possesses, and whatever pleasure our life enjoys.

Your most august Majesty's

Most devoted servant,

WILLIAM HARVEY.

To the most excellent and most accomplished man, Dr. D. ARGENT, President of the London College of Physicians, his singular friend, and the rest of the Doctors and Physicians, and his most loving colleagues. I EXPLAINED often before, excellent doctors, my new opinion on the motion and use of the heart, and the circulation of the blood, in my anatomical lectures; but now confirmed for nine years and more by many ocular demonstrations in your presence, illustrated by reasons and arguments, and freed from the objections of the most learned and skilful anatomists, so often desired by all, importuned by some, I have produced it to the world in this little book. Unless thus transmitted through you, I should have little hope that it would be received as authentic and worthy of confidence: since I can call you, who are worthy of credit, as witnesses of almost all those observations from which I gather truth or confute errors. You, who have seen my dissections, and in their ocular demonstrations, which I here assert to the senses, were accustomed to stand by and assist me. And since this book alone affirms that the blood passes and returns through a new course, contrary to that which was illustrated and received for so many ages, by innumerable, most renowned, and most learned men, I was very much afraid that I should appear too arrogant, if I permitted this little book, which was perfect some years ago, either to go before the public, or to pass beyond the sea, if I had not first propounded it to you, and confirmed it by autopsy, answered your doubts and objections, and received the approval of your accomplished President; but I was persuaded that if I could sustain what I proposed before you, and our College so famed by many, and such learned men, then there was much less to be feared from others; and that favour was not less to be hoped, which for the love of truth you granted me, from philosophers of the same caste. For true philosophers, who glow with the love of truth and wisdom, never find themselves so full of self-importance, or abounding with their knowledge, but that they give place to truth, whensoever, and from wheresoever it comes. Who is so narrow-minded, that he believes art or science, so absolute in all things, and delivered so perfect by the ancients, that nothing is left to be done by the diligence and industry of others? But most people profess that the greatest part of those things which we know, to be the smallest part of those things we do not know. Philosophers do not suffer themselves to be the slaves addicted to the traditions and precepts of any individuals, that they would destroy liberty, and not give credit to their eyes; nor will they swear to the words of antiquity, so as to leave, and desert in the presence of all, their friend truth. But as they estimate those persons, credulous and idle, who on a first sight admit, and b

lieve all things; so they likewise esteem those stupid and senseless, who do not see things manifest to the sense, nor acknowledge day with a meridian sun: not less do they teach to decline the fables of the poet, the follies of the rabble, than the epoch of the sceptics in philosophy. So all studious, good, and honest men never suffer their minds to be overwhelmed with the passions of indignation and envy, that they will less hear with a patient mind, those things which are advanced for truth, or understand a thing that is fairly demonstrated: nor do they think it base to change their opinions, if truth and evident demonstration persuade them; nor do they think it dishonest to desert errors, however ancient, when they well know that it is human to err, and that many things are discovered by chance, which any one may learn from another, an old man from a youth, a rational man from a fool. But in this tract, my well-beloved colleagues, I was unwilling to make an ostentatious exhibition of great reading and research, by quoting the names, works, and opinions, of anatomical authors and writers, thereby fatiguing my memory, and exhausting my time. And another reason was, because I do profess to learn and teach anatomy, not from books but from dissections; not from aphorisms of philosophers but from the fabric of nature.

As likewise neither do I intend nor endeavour to defraud any of the ancients of the honour due to them, nor affect the just rights of the moderns; nor do I think it honest to contend or contest with those who have excelled in anatomy, and who have taught me. Moreover, I am not willing to ascribe the crime of falsehood to him desirous of truth, nor to charge any man, by accusing him of error; but I follow the truth only, and have done every thing for that purpose, that I might be able to bring forth something, grateful to the good, agreeable to learned men, and useful to literature. Farewell, most excellent doctors, and favour your anatomist,

WILLIAM HARVEY.

PROEM,

By which is demonstrated, that those things which are already written concerning the Motion of the Heart and Arteries, are not firm.

IT is worth while of him who thinks of the motion, pulse, use, action, and utilities of the heart and arteries, first to evolve those things which are inculcated by other writings; to animadvert on those things which have been commonly spread and delivered, that those things which have been rightly spoken may be confirmed, and those that are false may be amended by anatomical dissection, multiplied experience, diligent and accurate observation.

Almost all anatomists, physicians, and philosophers to this day, suppose with Galen, that the use of the pulse is the same with

that of respiration; and that they differ in one thing only, that the one emanates from the animal, and the other from the vital faculty, being similar in all other things, either as to utility or the mode of action; hence they affirm (as Hieron, Fabr. ab Aquapendente, in his book on respiration, lately published) that since the pulse of the heart and arteries is not sufficient to eventilate and refrigerate; so the lungs were fabricated by nature about the heart. Hence it appears, that all things our predecessors said of the systole and diastole, of the motion of the heart and arteries, they had delivered in relation to or regarding the lungs.

But since the motion and constitution of the heart are different from those of the lungs, and those of the arteries from those of the chest, it is probable that other uses and utilities should follow, and that the pulse of the heart, and also the use and pulse of the arteries, should differ from those of the breast and lungs.

For if the pulse and respiration serve the same uses, and that the arteries receive air into their cavities in the diastole, as they commonly say, and that they emit in the systole fumes through the pores of the flesh and skin; also that in the time between the systole and diastole they contain air, and that every time they either expel air, spirits, or fumes, what will they answer to Galen, who wrote a book that blood was naturally contained in the arteries, and nothing but blood; that there are neither spirits nor air, as we can easily collect from the experiments and reasons in the same book?

And if in the diastole the arteries are filled with air, which they take in, in a greater pulse, there enters a greater quantity of air: therefore a great pulse existing, if you immerse the whole body in a bath, either of water or of oil, it is necessary that the pulse should either become smaller or much slower; since it is more difficult, if not altogether impossible, that the air should permeate the arteries through the body of the bath which surrounds them. In the same manner as all arteries, profound as well as cutaneous, are at the same time, and with the same velocity distended, how can the air pass through so freely and quickly the skin, flesh, and deep seated structures of the body as through the cuticle alone? And how do the arteries of the embryo draw the external air into their cavities through the maternal abdomen, and through the structure of the uterus? And how shall whales, dolphins, and great fishes, and all sorts of fishes in the bottom of the ocean, take in air, with a quick pulse in the systole and diastole of their arteries, through such a great mass of water? But to say they absorb the air implanted in the water, and return their fumes into it, is not unlike fiction. And if in the systole the arteries do expel their fumes out of their concavities, through the pores of the flesh and skin, why

not the spirits also, which they say are contained thereto in the arteries, which are much thinner than fumes.

And if the arteries receive and return the air, both in the systole and diastole, as the lungs do in respiration, why do they not do this when a wound is inflicted by arteriotomy? The trachea being divided, it is clear that air enters and returns by two contrary motions? but an artery being divided, the blood immediately escapes with force, with one continual motion, and it is manifest that the air does not enter or return.

If the pulse of the arteries refrigerate and eventilate, as the lungs and the heart itself, how do they commonly say that the arteries convey the vital blood, replenished with vital spirits, into every part of the body? which foment the heat of parts, awake it when it sleeps, and recruit it when consumed? And how (if you tie arteries) parts immediately are not only torpid, cold, and also pale, but at length cease to be nourished? which happens, according to Galen, because they are also deprived of that heat which proceeded from the heart above through all parts. As hence it is evident, that the arteries rather convey heat to the parts than refrigeration, or evintation or cooling. Besides, how shall the diastole draw at the same time spirits from the heart to warm the parts, and also cold from without?

Further, although some assert, that the lungs, arteries, and heart do serve for one and the same purpose, yet they say that the storehouse of the spirits, and likewise that the arteries do contain spirits, and also transmit them abroad; but, contrary to the opinion of Columbus, they do deny that the lungs do form any spirits or retain them. They also affirm with Galen, contrary to the opinions of Erasistratus, that blood is contained in the arteries, and not spirits. These opinions seem to disagree one with another, and to confute each other by turn, inasmuch that all are not suspected without cause. It is evident that the blood is contained in the arteries, and that the arteries alone do distribute blood, as proved both by the experiments of Galen, and is manifest by the cutting of an artery in wounds, (which Galen asserts in his book that the blood is contained in the arteries, and in very many places) that by a great and forcible profusion the whole mass of blood will be drained from the body in the space of half an hour. The experiment of Galen is this. If, said he, you tie the artery in two places with a ligature, and it being divided longitudinally, you will find between the two ligatures in the artery, nothing but blood, and thus he proves that blood only is contained.

Hence also it is lawful for us to reason in the same manner, if you find the same blood in the arteries which is in the veins being tied and divided, which I have often discovered in dead men and other animals. By the same reason we can likewise conclude,

that the arteries contain the same blood as the veins, and nothing but the same blood. Some, while they endeavour to solve this difficulty, affirm that the blood is spirituous and arterial, tacitly concede that it is the function of the arteries to convey blood from the heart to every part of the body, and that the arteries are full of blood; for spirituous blood is still blood. Also blood as blood which flows in the veins, no one can deny to be imbued with spirits. But if the blood in the arteries swells with a greater quantity of spirits, nevertheless it is to be supposed that these spirits are inseparable from blood as those spirits which are in the veins; and as the blood and spirit constitute one body, as whey and butter in milk, and heat in warm water, by which body the arteries are filled, and the distribution of which from the heart the arteries do effect or perform, and this body is nothing else but blood. But if they say that this blood is attracted from the heart into the arteries by their diastole, then they seem to presuppose that the arteries, by their own distention, are filled with that blood, and not with ambient air. For if also they say that the arteries are filled with ambient air, how and when do they receive blood from the heart? If in the systole that can be accomplished, it is impossible the arteries should be filled when they contract, or be filled and not distended. But if in the diastole they shall together receive the blood, the air, the heat, and the cold, two contrary uses, that is improbable; further, when they affirm that the diastole of the heart and arteries, and also the systole, are present at the same time, one of these is inconsistent; for how can two bodies so firmly connected to each other, when they are both distended, that one of them can draw from the other, or when they are contracted at the same time, how will one receive any thing from the other? Above all, it is perhaps impossible that any body, while it may be distended, can attract any thing into itself, for to be distended is to suffer, unless as a sponge returning to its ordinary condition after external pressure is removed. It is difficult to suppose that any such power can exist in the arteries. But I think I can easily demonstrate, and have before demonstrated, that the arteries are distended, because they are filled like sacs or bags, and not inflated like bladders. Notwithstanding that the blood is contained in the arteries, Galen's experiment, in his book, holds the contrary. He cut the denuded artery longitudinally, and inserted a reed, or small pipe, from which the blood could not flow, the wound being closed. So far as this, he says, the artery will not pulsate, but as soon as you contract its coats and the pipe by a ligature, you shall not see the artery pulsate more beyond the ligature. I have not performed this experiment of Galen's, nor do I think it can be done on a living body, on account of the eruption of the impetuous

blood from the arteries ; nor will the pipe or tube close the wound without a ligature, and I doubt not, that the blood will flow beyond the cavity of the pipe. Nevertheless Galen, by his experiments, seems to prove that the pulsific faculty proceeds through the coats of the arteries from the heart, and that the arteries, while they are distended by this pulsific faculty, are filled, because they are distended as bellows ; not distended, because they are filled as bags.

But the contrary is manifest in arteriotomy and in wounds ; for the blood is effused with force, by jetting sometimes farther, sometimes nearer, and the jet is always in the diastole of the artery, and not in the systole ; by which it appears, that the artery is distended by the impulse of the blood, for while it is distended it is not possible that the blood can be projected with such force ; it (the artery) should rather attract air into it through the wound, according to those things which are vulgarly said of the use of arteries. Nor can the thickness of the arterial coats impose upon us, that the pulsific faculty can proceed from the heart by these coats ; for in some animals the arteries differ in nothing from the veins, and in the extreme parts of man, and in the minute distribution of arteries, as in the brain, hand, &c. no one can distinguish by the coats, arteries from veins, for the same coat is common to both.

Besides, in aneurism produced from the incision or erosion of an artery, there is entirely the same pulsation as in all arteries, and, nevertheless, it has not the coat of the artery. The most learned Riolan, in his seventh book, attests this with me.

Neither will any one suppose that the function of the pulse and respiration are the same ; because we behold, as Galen says, from the same causes, the pulse and breathing are more frequent, greater, and quicker, as by running, anger, bathing, or by anything that induces heat. For not only is that experiment false which Galen endeavours to prove—that when from immoderate repletion the pulses are greater, and the respirations less, but in boys the pulses are frequent, the respiration, in the meantime, is rare.

In the same manner in fear, care, and anxiety of mind, also in some fevers, the pulses are quick and frequent, the respirations are slower. These, and the like inconveniencies, follow the received opinions on the pulse and use of the arteries ; not less, perhaps, are these things, which are affirmed on the use and pulse of the heart, entangled in many and inextricable difficulties.

ON THE

CIRCULATION OF THE VITAL FLUIDS.

By THOMAS WOOLLER, Surgeon, Pimlico.

OF all the phenomena which interest the minds of physiologists, there is none so deserving of especial attention as the vital motions, and of these more than all—the motions of the vital fluids. By the vital fluids we mean all the fluids which move in the vessels of animals and vegetables. Whether the sap of the vegetable has a real *circulatory* course has not been discovered, but that it has a perpetual and pervading motion through the living plant, has long since been proved to demonstration. But the great question, how these vital fluids of the two living kingdoms are enabled to move, has never been decided, but still remains for genius and industry to solve. The cause of the motion of the heart had engaged and perplexed the minds of philosophers, long before they knew that the blood circulated, but by the discovery of the illustrious Harvey the interest of the problem was greatly increased ; and the still more recent exposition of the motion of the sap has added to the subject a tenfold interest. Reason has been strained and tortured at the task ; multiplied experiments have been made and incessantly reasoned on, theories have been invented, modified, and seemingly confirmed, but the question re-echoes to the cry of every discovery, argument, and invention, what is the cause of the action of the heart, what is the cause of the vital circulation ?

When attempting to elicit the cause of the sanguineous motion, some have dissected the structures of the heart and vessels, others have analyzed the blood itself, and many have subjected both solids and fluids to numberless tests, both chemical and mechanical. Many theories have been founded on experimental and many on theoretical inquiry, and to endeavour to enumerate all that have been broached would certainly prove a tedious, and probably a fruitless task. If the reader be desirous to learn how far the unremitting researches of the two last centuries have succeeded in explaining the circulation of the blood, let him form his opinion by the single, but pregnant fact, that the circulation of arterial blood is attributed to the action of the heart, an action which is said to depend on *irritability*, by which same property of irritability we must understand a faculty which cannot be accounted for. If such a theory as this can satisfactorily explain the circulation of the blood, it must surely deserve an extensive application, and not be limited to the heart and vessels, or to any muscle or body whatever. When a body is singularly mobile and active, it were easy to say it is irri-

table, and when this mere acknowledgement of the fact of its mobility is mistaken for the cause of it, the mind will not fail to rejoice in its wisdom, although it be only cheated into folly.

Matter is more or less irritable, or, to use a less equivocal term, more or less mobile, according to physical conditions, and until these conditions are clearly exposed, neither mobility, excitability, nor any other word or words, will avail; they will neither explain contraction, dilatation, nor tremulous motion, nor any other kind of motion. Whether the functions of the heart have been rightly appreciated, and its actions and motions properly distinguished, we shall further proceed to inquire.

When the heart is extracted from a living animal, it does not immediately cease to beat, but for a short time it will continue to dilate and contract; and when its action has wholly subsided, it may again be excited to motion by various agents, as warm water, sharp points, and the galvanic battery. The most powerful excitant appears to be *heat*; heat alone can stimulate the heart into action, after it has thoroughly cooled, and can even awaken an animal which is frozen and stiff, to motion and life. Hence we may start the inquiry, why should heat be so indispensably necessary to the action of an organ which is supposed to depend on a mystical power, or peculiar principle? Does it not seem that irritability has a very close dependance on heat or caloric? We find that while caloric is retained in the substance of the heart, the organ can act, and that when deprived of its heat, its action ceases; and again, when exposed to this element, again it will slightly contract and dilate.

We will now consider whether the motion of the heart be always muscular and impulsive of the blood, and whether by virtue of its muscular contraction, it be mainly the cause of the blood's circulation. The writer is inclined to discredit the ideas, that either the heart or arteries are generally the movers of arterial blood, or that they *ever* do circulate the blood by their own inherent and exclusive power. This scepticism arises in part from the following reflections:—

Reflecting on the original material of animal organs, we find it invariably fluid. The spermatic fluids contain no heart nor arteries, nor can the rudiments of a heart or vessel be discovered in it; and therefore the motions of the animal fluids must originally commence *before the heart and arteries exist*; hence it is not irrational to infer, that the same principle or power which begins the motion of the fluids may carry it on through life, whatever that principle or power may be.

With respect to the heart, some animals have none, and all vegetables are devoid of this organ, yet their fluids are motive.

The heart and arteries have a natural tendency to ossify and harden with age, yet the blood seems to circulate as healthily in the old as the young.

That the heart can circulate the blood is contrary to analogy, for the waters of the earth are not circulated by their channels, neither can the artizan make a tube or machine that can move itself, or any other body, solid or fluid.

Neither irritability, sensibility, nor even the development of the mind, seems prior to the circulation, and if they are not, neither can be plausibly assigned as the cause of it; but, on the contrary, it appears that circulation is the *antecedent*, and all the above attributes of life the *sequences*. By a sequence we do not mean *natural* consequence, because we cannot account why irritability, sensibility, and the immaterial mind, should follow and not precede; but such is apparently the order of nature, and such the will of the Deity.

The above are submitted to the reader as obvious objections to the general opinions on the vital circulation; but they only form a small part of many which frequently occur to the writer. We will now attempt to show that the animated fluids can circulate themselves. We will advance some reasons why the modern theory of the cardiac and vascular actions should be *totally reversed*, and why we should attribute the action of the heart to the action of the blood, and not the action of the blood to the action of the heart.

The writer entertains the following ideas on the motion of the blood and the other vital fluids:—

1. That the venous blood (of the higher class of animals), combined with chyle, having passed through the lungs, and having thus been exposed to atmospheric air, undergoes a change in all essential points identical with combustion; that *heat* is evolved in the lungs, and continues to be emitted in the heart and arteries, especially the heart, and that this heat impels the arterial blood.

2. That it is this evolution of heat, occasioned by the commixture or contact of air, and the venous blood and chyle, which makes what we call the red, or arterial blood, and thus the same principle that *makes it move it*; and hence the more rapidly the heat is evolved, the more quickly the blood will circulate, and thus *the equal heat of the body is always maintained*.

3. That the blood does not (at least not constantly) stimulate the heart, but that all kinds of vital circulation are generally independent of the sensitive faculty; and that when the heart is excited to act through the medium of the nerves, it does not act by the motive power of the nerves themselves, but that by some unknown means they bring into action either the latent or the free caloric of the blood; for when the power to retain and evolve heat is no more, the nerves are no longer sensible nor irritable.

That the arterial blood is capable, by its own natural faculty of evolving heat, to circulate itself; and hence the writer doubts

whether the action of the heart be constant or only occasional, and suspects that the action of the heart is generally effected *directly* by the power of the blood in its cavities; that it acts because it is acted upon, and that when the heart does really exert its muscular power of contraction or dilatation, that this action also is occasioned by the repulsive agency of the blood, but of that which is contained in its parietes.

That the muscular action of the heart is always a consequence of extraordinary causes of excitement, as experiments, violent exertion, &c. That the just estimation of familiar physiological facts is amply sufficient to convince us that the cause of the motion of all the fluids of every living existence, animal and vegetable, is one and the same, and that that cause is *caloric*.

There are numerous phenomena of life which we cannot explain on physical principles, and some of these phenomena appear not only incompatible with general laws, but even inconsistent with each other. Opposite effects will sometimes result from causes apparently similar, and the faculties and functions of an organ be lost and regained without any evident cause whatever. Such phenomena as these are always connected with the vital circulation. How we ought to attempt to explain them deserves to be deeply considered. The natural method of theoretical inquiry is well known to all men; it is to endeavour to explain the causes of effects which are not understood, by the causes of effects which are clearly comprehended. Thus by that which is enlightened we illumine that which is gloomy, and thus having ignited our torch at the sun, we are prepared to explore the caves of the earth. Thus, according to this, the plain logic of nature, let us try to find the cause of the vital circulation. Let us also direct our minds on striking, rather than on numerous facts; for the cause of effects so general and important as the motions of the vital fluids, is not to be found by the faculty of memory, but rather by that of judgment. Such causes are found to be general principles, and the principles of nature are not to be sought in mysterious minutiae, but always in plain, consonant, and prominent phenomena.

First, we will turn our attention to the source and origin of the vital motion of the embryo and ovum. How the embryo is primarily formed in the matrix we are totally ignorant; we know not whether the embryo contain all the rudiments of a living being, or whether it contain any of them, and it does not concern us to inquire at present; but admitting the conjecture, that the rudiments of organs exist in the embryo, how, we would ask, are they urged into motion, and to shew the phenomena of life? While in the matrix the ovum gradually enlarges, and there its fluids must be constantly in *motion*; but no sooner is it expelled, and exposed to a colder

medium, than its growth ceases and its motions subside. But when again exposed to the influence of heat, the growth of the embryo again progresses, and again the intestinal motion is renewed. Here we have before us a complete demonstration that the first *exciting agent* to life is caloric or heat; and hence it would not be gratuitous to presume, that the same principle which is efficient to begin the action of the vital fluids, is equally efficient to continue it.

If we take the egg of a fowl, and subject it to chemical analysis, we shall find it contains the combustible element *hydrogen*, and thus this analysis proves that the ovum is adapted for generating heat. The same is evinced by spontaneous chemical action, i.e. by a natural analysis. The spontaneous chemical change of an animal or vegetable substance may be briefly expressed, as thus—it is a change from a combustible to an incombustible state. Through whatever forms of matter the changing body may pass, these forms only indicate different stages of the same process; they are effected by the same principle, and end in the same condition, incombustibility. The principal agent in the change is caloric; it is by this principle that the germ is first warmed into life, as the lamp wick is lighted into flame.

Combustion we designate a chemical change, and the change of the blood in the lungs a vital one. The nature of both is the same, it consists in evolution of heat, it is the *passage of combustible materials to an incombustible state*. The spontaneous changes of the blood, when out of the body, are also in principle the same. All these changes may be designated chemical, and as motion is a necessary and inseparable adjunct to chemical action, all have motion; and hence it is more than probable that the cause of the motions in all is one and the same. Let us remember that we are reasoning on the principles of motion, and not on the changes of forms and properties of matter. We do not seek a new generating principle for every new change of physical properties. The fluids, for example, which nourish the vine-tree, experience a change as they circulate, which we please to call vital. It appears to be a chemical saccharine fermentation, which generates and nourishes the grape. When this fruit is gathered, and placed under favourable conditions, it will pass from the saccharine to the vinous, from the vinous to the acetous, and from the acetous to the putrid fermentations. Very different matters will result from each action, but heat is the agent, and concomitant of every transformation. However the course of these changes may be modified, the process will still be one and the same; it will be the evolution of caloric, it will be the transmutation of the nutritive food of the vine from a combustible to an incombustible state. Now if the vinous, acetous, and putrid fermentations, cause evident intestinal motion, will

not saccharine fermentation cause motion of the sap; and if fermentation, or the evolution of caloric, circulate the sap, why not the blood? It is true that the change which the blood undergoes in the lungs is not saccharine fermentation, nor vinous, nor acetous, nor putrid; and if we rigidly decide by the violence and products of the change, neither is it fully entitled to the name of combustion, though analogous to it. But all this invalidates nothing; however we may nominate the process of change of the blood in the lungs, it is a chemical decomposition, and in principle the same as fermentation and combustion. Heat is evolved from it, and heat is the same element, and possessed of the same properties, whether existent in the centre of its source, the sun, or developed in an animal or vegetable body—heat, we repeat, is evolved from the nutriment of blood and sap, and being evolved, must inevitably exert its repulsive power; then does it not, in some degree, at least, circulate the blood and sap?

Whether this repulsive heat of the blood be adequate to impel it in its course, the writer intends to inquire in subsequent papers. He will also embody collateral remarks on the laws of vitality. If he fail to establish his theories by reasoning, he will not attempt to support them by sophistry. No arguments will be drawn from equivocal experiments; none from profound speculations. He will neither affect the classical learning of the scholar, nor the shrewdness of the student of abstract science. He will take for his guide the universal laws of motion, try to explain these laws by familiar examples, and apply them to all analogous phenomena of life; thus he will appeal from the common knowledge to the common sense of mankind.

The Edinburgh Medical and Surgical Journal—April.

THIS periodical has long maintained its high position as one of the most scientific journals extant; and has never deviated from that calm and important path pursued by all the true and ardent cultivators of medicine. Though assailed by virulent invective which most unfortunately had, a few years ago, crept into medical journalism, our esteemed and valued contemporary never condescended to notice the puerile and scurrilous attacks made upon it. The late Professor Duncan, its conductor, was a man of too gigantic a mind, and too profoundly versed in medical literature, to be affected by the power-

less shafts of ridicule levelled by those illiterate censors, whose superficial acquirements were too manifest to excite any thing but ineffable contempt. It is also due to the present editor to state, that he has imitated the example of his revered predecessor, and has now the great satisfaction of witnessing the downfall of his scurrilous rivals. He maintains his position, while others are rapidly progressing to oblivion.

In the present number, there are eleven original papers, and these we now propose to analyze.

The first article is entitled "On Permanent Patency of the Mouth of the Aorta, or Inadequacy of the Aortic Valves. By D. J. Corrigan, M. D." This disease we are informed is not uncommon, and forms a considerable proportion of cases of deranged action of the heart. It arises from partial absorption of the valves, by which apertures are formed, through which the blood flows back into the ventricle; or from rupture of one or more of the valves; or these may be tightened or curled in against the sides of the aorta, so that they cannot spread across its mouth, and leaving an opening about the centre of the vessel. Another cause is the dilatation of the mouth of the aorta when affected by aneurism, as in old persons, by which the valves will be rendered inadequate to the performance of their functions.

There are no pathognomonic symptoms of this disease, but its existence is determined by physical and stethoscopic signs, which may be referred to the three following:—1, visible pulsation of the arteries of the head and superior extremities; 2, *bruit de soufflet* in the ascending aorta, in the carotids and subclavians; 3, *bruit de soufflet* and *fremissement*, or a peculiar rushing thrill felt by the finger in the carotids and subclavians. In conjunction with these, the pulse is full. When a patient labouring under this disease is stripped, the arterial trunks of the head, neck, and superior extremities, im-

mediately catch the eye by their singular pulsation.

The stethoscopic signs have been already mentioned. Dr. Corrigan accounts for this increased pulsation by stating that a portion of the blood driven into the ascending aorta, regurgitates into the ventricle, and hence the aorta and vessels arising from it, become lessened in their diameter; while they are in this state the ventricle contracts and impels quickly into them a quantity of blood, which suddenly and greatly dilates them. The author supports this view by many satisfactory arguments.

Of eleven cases, two only occurred in females, and none at a very early age. The youngest person affected was twenty years of age. Inadequacy of the aortic vessels differs from narrowing of the left auriculo-ventricular opening, which is not unfrequently met with in children, and even in infants at the breast. The causes of the disease are uncertain. In one case it succeeded acute rheumatism, which had been accompanied with symptoms of pericarditis. In some it was ascribed to an inflammation of the chest which had occurred months or years before, while in others it could not be ascribed to any cause.

The patient usually complains of oppression and straitness across the chest, with palpitation on any slight exertion, and sometimes of the symptoms of asthma. As the disease proceeds, the breathing becomes more difficult, and the patient starts from his bed at night under the dread of suffocation. At length there is orthopnoea, face pale or purple, as in suffocative catarrh; œdema of the legs comes on, and soon extends to the hands and arms, the respiration becomes excessively difficult, and the sufferer dies exhausted. The pulse is usually from 80 to 110, full and vibrating to the last moment of life. During the progress of the disease, the superficial branches of the carotid, brachial, radial and ulnar arteries, and their branches, wherever they are near

the surface, become apparently enlarged and tortuous; the brachial in parts of its course almost doubling on itself. The heart in all cases was enormously enlarged, which arises from the state of the left ventricle, and it appeared more like that of a bullock than that of a man. The impulse of the heart was less than natural, even where the hypertrophy of the left ventricle was greatest. In some cases no impulse could be felt; and in none did the impulse during life give at all a proportional measure of the excessive hypertrophy discovered after death. Laennec stated the contrary; but many later observers, Andral, Graves, &c. have adduced positive facts subversive of his conclusion. Dr. Graves had observed violent pulsation of the heart in pneumonia, which led him to suppose the existence of hypertrophy and dilatation, though after death the heart was healthy: hæmoptysis rarely occurs in the disease under notice. Its duration varied from two to eight years.

Our author gives an elaborate diagnosis, but this we omit, as the signs already enumerated seem conclusive. He cautions the practitioner against confounding it with aneurism of the arch of the aorta, or root of the arteria innominata. Dr. Corrigan refers to the opinions of the best writers on diseases of the heart as to the treatment, which consists in bleeding and starving, which he argues is injurious. He contends, on the contrary, that the most beneficial measures are those which, by strengthening the general constitution, will give a proportional degree of vigour to the muscular power of the heart, and thus enable it to carry on the circulation in the absence of that assistance which it ought to receive. He, therefore, recommends a generous and sufficient diet of animal and vegetable food, and a total abstinence from malt liquors, which very much increase the mass of fluids. The patient may attend to business, provided it does not produce debility; and as those labouring under disease of the heart fear sudden

death, it is right to state that this event rarely happens in the disease under consideration. He relates a case in which the other treatment was carried to the fullest extent; the patient getting worse and despaired of, it was abandoned, and from that hour he got better, and by full diet is now so much improved, though the disease is present, that he is able to attend to a laborious employment. Several years have elapsed since the starving plan was followed. The result of this case induced our author to adopt the treatment he recommends at present. *Digitalis* aggravates the disease. Though small bleedings are condemned, yet when the dyspnœa or orthopnœa is distressing, one full bleeding, followed by an opiate, is indispensable. The disease is seldom seen in its commencement, and when established, no remedy can perhaps remove it. In other diseases of the heart there is a danger of pulmonary apoplexy or hæmorrhage, and the sufferer is in perpetual fear of sudden death. In this disease there is no such danger; and if seen in its first stage, perhaps mercury and counter-irritation might prevent it.

The profession must be deeply indebted to Dr. Corrigan for this highly interesting paper, in which he describes a form of disease hitherto unknown: this, and his other papers on the Functions and Diseases of the Heart, do him infinite credit as a scientific and judicious physician.

The second paper is headed "Surgical Cases. By John Campbell, M.D. Surgeon to the Royal Infirmary." The first case was one of spreading gangrene of the lower extremity, which required amputation of the thigh, before the line of demarcation between the healthy and diseased parts was observed. Dr. Campbell cites various modern authors, Guthrie, Larrey, and Ballingall, in support of his practice; and against the authority of Sharpe, Pott, and Richter. His colleague, Mr. Liston, concurred in the opinion of the necessity of the operation.

The succeeding case was one of inguinal hernia, terminating in artificial anus, which was finally cured. There was nothing to justify an operation; the hernia gave way, fecal matter passed through the groin, and a cure was effected by ordinary treatment. Several similar cases are cited.

The third case was one of ulceration of the face, followed by contraction of the mouth. The ulcerations yielded to the iodine ointment. Professor Christison suggested the operation practised by Dr. Dieffenbach, of Berlin, for the state of the mouth. This was resorted to, as the patient had difficulty in taking food, had constant drivelling, and defective articulation. The narrator performed the following operation:—"The point of a bistoury, with a very narrow blade, was introduced into the edge of the upper lip, close to the angle of the mouth, and carried outwards in the direction of the ear, for a short space, keeping it between the integuments and the mucous membrane of the mouth. The point of the instrument was then made to protrude through the integuments, which latter were divided as far as the bistoury had penetrated, by turning its cutting edge towards them. A corresponding incision was made in the same manner from the edge of the lower lip, and parallel to the first. These two incisions were next united by a lunated one made between their extremities on the cheek, and convex towards the ear. The portion of integuments included in these incisions was now dissected out, together with some condensed cellular substance lying over the subjacent mucous membrane, which latter was left entire, after having been separated for a short way from the integuments at their cut edges. I then divided the exposed portion of mucous membrane along its middle, leaving a small portion of it entire at the outer angle, opposite the lunated incision mentioned above. The divided edges of the mucous membrane were next everted, and

brought into contact with the cut edges of the integuments, to which they were secured all round by means of sutures. A similar operation was performed at the opposite angle of the mouth, after which the parts were covered with some folds of surgeon's lint moistened with cold water, which were directed to be renewed from time to time.

Some tumefaction of the parts took place on the following day, but this soon subsided, and on the fourth day the sutures were removed, adhesion having been then sufficiently completed."

This is an exceedingly interesting case, and reflects great credit upon the operator.

The fourth, and last case, was one of "Destruction of the Eyelids, followed by a singular appearance of the Eyeball." No satisfactory account could be obtained of the case. The man had syphilis, and destruction of the prepuce. Though the eyeball was uncovered, he suffered little inconvenience, which proves the erroneous view of those who recommended the removal of the eye in cancer of the lids.

The third paper is entitled, "Observations on the Obstetric Operation of Turning." By Thomas Radford, Esq. Senior Surgeon to the Manchester Lying-in Hospital.

The author cites the directions of many eminent obstetricians on the operation of Version, especially those of Denman, Burns, Gooch, Merriman, Blundell, Baudelocque, Gardien, Velpeau, and Dewees, which inculcate that both or one leg should be brought down in performing this operation. Mr. Radford examines, impartially, every step of the operation, which he describes with great accuracy and fidelity, and then clearly and incontrovertibly proves, that there is less danger to the infant in feet than in breech presentations. He remarks that all agree as to the propriety of bringing down one lower extremity when the second cannot be readily grasped, and proves that in all cases

this plan is preferable, inasmuch as we bring down a cone by its apex. By admeasurement of several infants, after birth, he has ascertained, that the presenting part of the head, and also the breech, measures from 12 to 13½ inches, but when one lower extremity is fixed on the abdomen, and the other presents from 11 to 12½ inches, and in feet presentations from 10 to 11½ inches. It is therefore evident that an inch is gained by bringing down one inferior extremity only. We fully assent to the proposal of our author; but consider that proper caution must be observed not to injure the hip joint during the traction. We are convinced that the proposal is worthy of preference and adoption; and is a decided improvement of the operation of version; and we have no doubt but it will supersede the old method of bringing down both feet, which in many cases was impracticable. It will also supersede the objectionable practice advised by Gooch, Velpeau, and Hatin, but properly condemned by Professor Hamilton and many others, of reintroducing the hand to grasp the limb which could not be found on the first attempt. We speak advisedly when we say, that Mr. Radford has saved many more infants by his method than by the former; and it is also right to state that his practice has been more estimated, both in the hospital and in private life; and we can offer our testimony that the fullest confidence may be placed in any statement which is made by him. He is one of those scientific, experienced, and candid practitioners, who will offer no opinion but that which is based on truth, whose immutability neither time nor chance can ever overturn. We trust he will excuse us for expressing candidly our opinion of his merits; but we do so, because we daily observe so many false facts, and fictitious cases obtruded on the profession, and it affords us sincere pleasure to meet a contemporary in whose statements every confidence may be placed.

The next paper is on the same ope-

ration, " shewing how it may be performed with the least suffering to the mother." By John Robertson, Esq., Surgeon, to the Manchester Lying-in Hospital.

The author gives an excellent description of the anatomy of the genital aperture, and lucidly explains the difficulty which is encountered on passing the hand and arm, in consequence of the spasmodic contraction of the sphincter vaginae, and levator and sphincter ani muscles. The great object should be not to irritate these muscles during the passage of the hand, and to effect this the author suggests that the vagina should be completely filled with lard before any attempt is made to introduce the hand. He was led to the practice of this plan by a case in which the vagina was extremely sensible and contracted; and in which he effected version with ease to the woman and safety to the infant. He maintains that the left hand should be preferred in almost all cases; but we have shewn elsewhere that this recommendation is questioned by many eminent obstetric writers.

We fully agree with Mr. Robertson as to the use of the lard, as it allays the high degree of vaginal temperature, and decidedly renders the introduction of the hand less painful to the patient. He describes the operation of version very minutely; but this is so well known that we need not insert it here.

Observations on the General Principles and on the Particular Nature and Treatment of various species of Inflammation. By J. H. JAMES, Surgeon to the Devon and Exeter Hospital, and Consulting Surgeon to the Exeter Dispensary. London, 1832. Renshaw and Rush.

THE author of this work is well known to the profession as an able and scientific operator, whose boldness in tying the aorta has justly entitled him to the highest reputation as a practical

surgeon. In the work before us, he comprehends all those forms of inflammation which custom has assigned to the domain of surgery; but as the nosological division of the subject is perfectly arbitrary, he necessarily includes several inflammatory affections which belong to medicine and obstetrics.

A comprehensive treatise on inflammation has long been a desideratum in the medical literature of these countries, as Dr. Thomson's work has been out of print for some years, and though constantly sought for, has not, for some unknown reason, undergone a second edition; its want is now well supplied by the production before us. Mr. James possesses all the qualifications necessary for the execution of the task he has undertaken. He is a hospital surgeon of many years standing, and evidently one of sober and faithful observation, while his intimate acquaintance with the present improved state of medical science enables him to form a just estimate of the value of the latest opinions. His treatise is executed in a most satisfactory manner; it is an accurate, well-digested, well-written work, evincing deliberation, repeated and careful observation, extensive research, profound judgment, and fidelity.

It is impossible, in a journal of this description, to give lengthened reviews or analyses of elementary or systematic works, as its contents are different from monthly or quarterly periodicals; and therefore we are compelled to confine our notices and criticisms to a general expression of our opinion, on the merits or demerits of all productions that come before us. The necessity of attending to this arrangement must be obvious to every reader who is acquainted with periodical literature. The rapid progress of medical science, both at home and abroad, claims the especial attention of the weekly medical journalist; and is so extensive as in general to exceed the limits by which we are circumscribed. Taking this into consideration, and likewise the publi-

cation of lectures, our readers must perceive that we have little space for the insertion of critical reviews, which necessarily require copious extracts to render the author common justice. We trust that this explanation will prove satisfactory to authors; and we sincerely assure them, that it is often a matter of deep regret to us, to be unable to make copious citations from all works of value which we receive. They should also recollect the unparalleled fecundity of the press, and the multitude of books, of all sorts and sizes, which daily claim our attention; and also the anxiety of authors to obtain an early notice. Some writers are displeased because we do not notice their works or communications in our next Number after receiving them, forgetting that our pages may be partly or entirely printed when we receive them; or that more important or later intelligence is entitled to more immediate attention. In illustration of this position we may take this opportunity of stating, that the receipt of recent communications from foreign and other correspondents, obliges us, every week, to defer the insertion of articles which were in type, and intended for our next publication. We state these things for the information of our friends in general, and our author in particular.

To return from this digression to the production which gave rise to it, we have to state that Mr. James divides his work into two parts, and adopts the following arrangement:—

“In the first place, I have considered the questions connected with the ordinary powers and state of circulation, the state of the vessels under inflammation, and the symptoms which manifest themselves in the part.

“In the second, I have entered into the subject of sympathy, as connected with the extension of inflammation to the adjoining parts, and the influence reciprocally exerted between the system at large and the part inflamed.

“These constitute the materials of the first chapter. In the second, I have examined the principal causes which either predispose to the production of inflammation in a part,

or influence its progress when produced, whatever may be the original cause.

“These objects of inquiry may be divided into those more immediately depending upon the actual state of the system, as regards the condition of the nervous system; the digestive organs; the state of the circulating fluid, with reference either to its quality or quantity; the reciprocal influence of the solids and fluids, or circumstances connected with the condition of the part; and more remotely as regards the influence of temperament, diathesis, hereditary disposition, age, sex, habits, &c.; or extrinsic circumstances, as the influence of air, temperature, and climate.

“A separate consideration is the examination of the processes and products of inflammation, and their apparent purposes in the economy; and this forms the subject of the third chapter.

“In addition, although I must confess that the matter can never be completely handled apart from the consideration of the particular species of inflammation, I have offered a *general* view of the objects of remedial means, the principles on which they are understood to act, and the circumstances which would guide us in adopting them; and this concludes the first part of this work. The second has for its object the particular description of those various forms of inflammation which come within the view which I have above given.”—p. 4.

Our author first describes the physiology of the circulation, and the condition of the blood-vessels and nerves during inflammation. He next gives a luminous account of the symptoms, causes, and treatment of inflammation, noticing every fact connected with his subject concisely, yet comprehensively. He then describes local and general sympathy, sympathetic fever, irritation and irritability, the causes affecting the system generally which influence the progress of, or predispose to inflammation, as state of the mind, pain, preparation for surgical operations, state of the digestive organs, state of the blood, humoral pathology, plethora, inflammatory disposition, influence of the solids upon the fluids, of temperament, diathesis, hereditary predisposition, age, sex, habits, of air, temperature, and climate; the processes and products of inflammation, and every remedy employed for its treatment. Such are the contents of the first part of the work.

The second part is devoted to the description of the "Particular Nature and Treatment of the various species of Inflammation." This embraces the consideration of almost all the diseases called surgical, and is treated with great ability and judgment.

We have now given an outline of the matter contained in this work, and shall notice it in detail in our next. In the meantime, we are gratified to apprise our readers that every page of it is replete with instructive and valuable information, which must interest every one engaged in the practice of medicine. It is the only monograph extant in this country on the vast subject of which it treats, and ought to have a place in every medical library.

Ueber Schwebende Flecke im Auge, &c.
An Essay on Musca Volitantes.
 By A. W. NEUBER. pp. 32. Ham-
 burgh.

THE author of this little essay is himself subject to the disease which he describes, and which he attributes to the presence of certain parasitical productions analogous to microscopic algæ, in the two chambers of the aqueous humour; and in this opinion he is confirmed by a case recorded by M. Rust, who states that he has seen the *musca volitantes* disappear, by puncturing the chamber, and evacuating the aqueous humour. Many of the most celebrated physiologists and oculists deny that *musca volitantes* have a real existence, attributing their appearance to a partial paralysis of the retina, the black spots which are evident, being owing to the impression of the objects reflected on the retina not being perceived by it. However this may be, the fact is certain, that these spots may exist for years without the paralysis extending to the other parts of the retina, if such be always the cause of the *musca volitantes*, which we are much inclined to doubt.

M. Neuber considers that the ac-

tion of the negative pole of a galvanic battery will detach these fungi, but as yet he has not given it a trial. Whether the trial will prove useful we cannot pretend to say, indeed the whole subject is involved in doubt, and every attempt to elucidate it is worthy of praise. M. Neuber's theory is probably as good as any of those advanced by those writers who have preceded him; but the question is, if *musca volitantes* do indeed depend on parasitical growths in the chambers, what causes their appearance there? We incline to think it would require an *Oedipus* to solve that enigma.

History of Chronic Phlegmasiæ, or Inflammations, founded on Clinical Experience and Pathological Anatomy, exhibiting a view of the different varieties and complications of these Diseases, with their various methods of Treatment. By F. J. V. BROUSSAIS, M.D., &c. &c. Translated from the French of the fourth edition. By ISAAC HAYS, M.D. and R. EGLESFELD GRIFFITH, M.D. 2vols. 8vo. pp. 497—403. Philadelphia, 1831, Carey and Lea. London, Longman and Co.

THE works of M. Broussais excel all other systems of medicine, in being strictly conformable to the Baconian principles, or inductive philosophy. The illustrious author first observed disease at the bedside, carefully recorded the symptoms, treatment and morbid appearances. In no other systematic work do we find such an array of facts carefully observed; a better history of symptoms, a more cautious and judicious application of remedies, and a more graphic description of the results of disease. His bitterest opponents admit that the work before us "is a model of knowledge and originality in medicine." It is the result of extensive observation in military and civil hospitals for many years. The author had remarked that though there were numerous

treatises on acute inflammations, there were few on the chronic forms of these diseases. He soon found that the majority of chronic diseases had arisen from inflammation, which was either neglected, or inefficiently treated in its acute stage. He was so fortunate as to discover that all consumptions arose from this same cause. He was persuaded that it would be highly beneficial to humanity if any author would collect accounts of a great number of these acute diseases degenerated into chronic, of which writers cease to treat, as soon as they have no longer any hope of curing them. Our author hesitated for a long time to undertake this task, and succeeded in performing it in the most able manner.

"On perseveringly observing all diseases of debility which I met with," says M. Broussais, "I perceived that the majority of the cases appertained to chronic inflammations of the lungs and of the organs of digestion." Experience has convinced him that all the inflammatory affections of the lungs incessantly transform themselves into one another, and all terminate in phthisis pulmonalis. The full consideration of these affections occupies the first volume. We have perused this part with great pleasure and interest, and we hesitate not to recommend it in the strongest terms to our readers.

The second volume embraces the description of the phlegmasiæ of the abdomen. The distinguished author modestly states, that the phlogosis of the mucous membrane of the digestive canal, and of the serous membrane or peritoneum, are those only on which he possesses sufficient data.

The comparison of numerous facts has led our author to conclude, that phlogosis of the mucous membrane of the stomach was little known, though of frequent occurrence; and that many errors were daily committed in its treatment. These he ascribes to the want of a monograph on the subject. All these diseases of the stomach were ascribed to saburræ and asthenia; and

gastritis, in its highest degree of intensity, only was described. "I have attempted," says M. B., "to remedy this public calamity, by disposing, in a methodical series, such gastrites as are so obscure as frequently to escape diagnosis, and by endeavouring to connect them on the one hand to the most inflammatory varieties, and on the other to purely nervous sensibility and true feebleness of the stomach." We can by no means assent to the conclusions of the author on this part of his subject, for we cannot help thinking that he has described cases whose symptoms by no means justified his conclusions. He certainly has established the important fact, that subacute gastritis often occurs, is overlooked, and frequently mismanaged.

He has established the identity of the innumerable diarrhœas from their seat, cause, and treatment; and has developed and demonstrated the indications of the last with astonishing simplicity.

Acute and chronic peritonitis are treated of at great length; the latter proved to be of much more frequent occurrence than is generally supposed, and a more rational plan of treating the former suggested.

Such are the diseases described in these volumes. This translation, which is executed with ability, accuracy and judgment, renders a highly valuable work accessible to those unacquainted with the language in which the original was written. It is a work of great practical utility, and ought to be studied by every practitioner.

PHRENOLOGICAL PRIZE.

THE Phrenological Society of Paris will give a prize of the value of 500 francs, on the 22nd of August, 1832, for the best essay detailing those *facts, well ascertained, which constitute the science of phrenology at present*. Essays in French or Latin to be sent (post free) before the 1st of June, to M. Casimir Broussais, Chief Secretary Rue de l'Université, No. 25, Paris.

BIOGRAPHICAL SKETCH

OF THE LATE

BARON CUVIER.

GEORGE L. C. F. D. CUVIER, was born at Montbeillard, a town on the German confines of France, the 25th of August, 1769. He was sent to Stuttgart to complete his education; and there he not only learned the language of Germany, but familiarized himself with those practices of assiduous and persevering industry which distinguish the intellectual classes of that portion of Europe.

Cuvier repaired to Paris shortly after the breaking out of the French revolution. He took no part in the political scene, but surrendered, amidst all the temptations to mingle in the agitations of the day, his whole mind to the study of natural history. He was one of the earliest members of the Institute, which was established during the revolution, and which, as one of the benefits resulting from that sanguinary interregnum, must be regarded as a fact, in mitigation of the horrors perpetrated by the revolutionary leaders.

In 1798, when only 29 years of age, Cuvier published his *Tableau Elementaire de l'Histoire Naturelle*. The year afterwards he was appointed Professor of Comparative Anatomy. In 1804 in conjunction with Lacepede and Geoffroy St. Hilaire, he published *La Menagerie du Museum de l'Histoire Naturelle*. About this time and for a long period after it, he contributed many able papers to the *Annales du Museum*. The first edition of the *Recherches sur les Ossemens Fossiles des Quadrupedes*, appeared in 1812; the last edition was published in 1823, and was preceded by that *Discourse on the Revolutions of the Globe*, which has placed Cuvier in the very first rank of the great disciples of Bacon and nature. The great work on the *Mollusca*, was given to the world in 1818, and shortly afterwards the *Regne Animal* made its appearance. Of this

splendid performance Mr. Lawrence has left on record an eulogy which, in conception and expression exhibits a kindred supremacy of intellectual power with the subject of his praises.

“His work on the animal kingdom, in four volumes octavo, exhibits a methodical and philosophical view of the science of zoology: it places before us a subject capable of engaging and satisfying an inquiring mind; not a dry and uninteresting detail of names and forms, but the philosophical principles of zoological arrangement, and the execution of those principles through all their details: it establishes the divisions and sub-divisions of the living world through the whole of the vast scale, on the double basis of external and internal structure: it enumerates all the well-authenticated species which are known with certainty to belong to each sub-division; and enters into some details on those kinds which, from their abundance in these climates, the advantages we derive or the injuries we suffer from them, from singularities in their manners or economy, their extraordinary forms, beauty, or size, become objects of particular interest. Of the confidence which this work deserves as a representation of facts in contra-distinction from compilations the fruit of labours in the closet, we may form a judgment from this circumstance, that, with the exception of such animals as by their minuteness elude the researches of the anatomist, there are very few groups of the rank of subgenera mentioned in the book of which the author cannot produce at least some considerable portion of the organs. In each division and each species we are referred to the best sources of information; not by indiscriminate and accumulated quotations, which only increase and perpetuate confusion,—but by the selection of those works and figures to which the character of originality belongs: in short, by weighing, and not counting authorities.”

Lawrence's Lectures on Man.

We may observe that an English translation, or perhaps it would be more just to say, a paraphrase of the *Regne Animal*, is now in course of publication, under the superintendence of Dr. Griffiths. This version we would certainly recommend to those who have no acquaintance, and never hope to have it, with the French tongue, although we are well aware that Cuvier was by no means the old woman, or the partizan of antiquated opinions, which those who read the English “Animal Kingdom” only,—would, we fear, be much inclined to suspect him to be.

Innumerable papers connected with the subjects of his labours were published by Cuvier in reviews, annals, journals, dictionaries, editions of Buffon and Daubenton, &c. &c.

We have received from Paris a complete and scientific account of the post mortem examination, drawn up by Berard, the elder. This we shall give in our next.

Medico-Botanical Society,

May 22nd, 1832.

EARL STANHOPE in the Chair.

THE noble president announced the receipt of eight bottles of the mikaria guaco-juice, from Dr. Wm. Hamilton, of Plymouth. He remarked that it had been found to be a preservative against the bites of rattlesnakes, but its trial in hydrophobia was not as yet sufficiently satisfactory. Mr. Cesar Hawkins had administered it to a rabid dog, with the effect of diminishing the severity of the symptoms; and in a case in St. Thomas's Hospital, in which it had been tried internally and externally, it had afforded great relief. The juice would be distributed to any medical gentlemen, who were desirous of trying its effects in gout and rheumatism, for which it is recommended, as well as in hydrophobia, and he hoped that the gentlemen who would give it a trial, would communicate the results of their experience to the Society. He then sent round a bottle of the juice for the satisfaction of the gentlemen present, and called their attention to its peculiar smell; he could not say whether this odour was natural or caused by fermentation, during its voyage to England. He also announced the receipt of a packet of the seeds which produced this juice, recently arrived from the Caraccas; likewise a packet of the pods of the *Cæsalpinia Coriaria* or *Divioli*, the active principle of which is tannin.

It is considered as ranking next to catechu as an astringent, having the advantage of being an inspissated vegetable juice. A letter was read, describing the properties of these pods.

Specimens of various English medicinal plants lay on the table, furnished by Humphrey Gibbs, Esq. Treasurer; among them we remarked a fine specimen of the rhubarb plant in flower.

Mr. Costello was then elected a member of this society.

Mr. Gilbert Burnett, the Professor of Botany, then delivered a lecture *on the influence of plants on animals, and the reciprocal influence of animals on plants*, which he entitled ZOOLOGICAL BOTANY. He observed that there are functions of great importance to the existence of plants, but not equally so to that of animals; and these are the absorption of food, and its assimilation to their substance; others again, which are important to plants, but still more so to animals, as the action of plants on atmospheric air, which is not yet well understood. Priestley, by his splendid experiments, discovered that the air deteriorated by animals was regenerated by plants, and again rendered fit for respiration, but the process by which this is accomplished is not well understood. It was supposed that man inspired oxygen, and gave out charcoal acid gas; and that plants absorbed this charcoal acid gas, and restored oxygen; but, subsequently, they could not avoid seeing, by their experiments, that during the night plants absorb oxygen, and give out carbonic acid gas, and it was then supposed that plants breathed differently at different times; at one time, when healthy, giving out oxygen, and at another, when languid, carbonic acid gas. This led to a series of experiments, which he wished shortly to detail. Plants of various kinds were enclosed in certain portions of atmospheric air, and placed in the sunshine, in the bright daylight, or in the shade. Lime-water was introduced into the vessels covering

the plants; and whether the plants were healthy or languid, whether it was in the day or night, in the sunshine or in the shade, carbonic acid was always given out, always one kind of air. Still Priestley's experiment was true—that if combustion is made to go on in a glass vessel, and carbonic acid formed, the insertion of rose leaves will purify it. On pursuing this train of experiments, it was found that two functions were going on, one of respiration, the other of digestion. Carbonic acid is known to act as a stimulant to the human stomach, and so it is to plants; if plants are placed wholly in carbonic acid, which is supposed to be their true pabulum, they will become brown, and die, not from over-stimulation, but completely asphyxiated; but if moisture be present, it unites with the carbonic acid, they are absorbed, digestion goes on, the carbon becomes part of the plant, and the oxygen is given out. The quantity of carbonic acid thus purified is extreme. There are at this present moment 850 millions of human beings on this earth, and it is calculated that each expires eleven ounces troy, of carbon, daily—a pound wanting an ounce. Now, if we allow the odd 50 millions for the ounce wanting, we shall have 800 million pounds of carbon expired daily; to which amount fires, furnaces, &c. are continually adding, so that the whole quantity thus given out may be computed as nearly equal to that employed in his Majesty's navy. It must be evident that some means are required to purify the air, and return this carbon to the earth; and the process already spoken of is the means nature adopts; thus making the refuse of the animal the true pabulum of the plant. Mr. G. Burnett then proceeded to give further illustrations of the reciprocal influence of animals on plants, for which we regret we have not sufficient space.

The thanks of the Society were unanimously given to the Professor, after which the meeting was adjourned

to the 12th of June, when an essay on the common holly, by Dr. Rousseau, will be read.

THE RISING OF THE SAP IN PLANTS.

M. DUTROCHET'S DISCOVERY.*

It being at all times an obvious fact, that the nourishment of plants was supplied through the medium of their roots, and it having been ascertained beyond all doubt, that this nourishment was taken in the form of a fluid which ascended and circulated to the very top of the plant, whatever was its height, philosophers were naturally led to inquire by what powers this difficult process was effected. Difficult it certainly must appear to those who remember that this fluid or sap had, in its ascent to overcome the law of gravity, and upon the other hand, that the vessels through which it passed were endowed with none of that vital force which in the living body is so efficient in the work of propulsion. Upon a patient examination of the structure of plants, it was found that even in the largest vegetable growths, the vessels were all of a capillary form, and it was therefore concluded that the sap rose from the earth, through the plant entirely in accordance with the principle of capillary attraction. This opinion appears to have been universally entertained up to a recent period. That it should have been so implicitly adopted, as we find it to have been, will perhaps be a source of surprise to those who will

* Mr. Wheeler in fixing this discovery in the year 1828, seems to us to have been in error. The writer of this article, at all events, can prove in the most undeniable manner, that Magendie described the experiment of Dutrochet, which is mentioned towards the conclusion of this paper, on the 15th day of November 1827, in Paris. The writer will be happy to satisfy the inquiries of any person who may feel curiosity upon this point.

pay attention to the facts which we are now about to explain.

If the open extremity of a capillary tube, say a glass tube, be inserted in water, the water will rise in the tube to a height corresponding with the narrowness of the bore. This process is familiar to all our readers; but it is also true that the water will never rise to the full height of the tube, much less will it flow over and continue to do so. Capillary attraction, it is well known, cannot produce such an effect as that last mentioned. Now, on referring to the progress of the sap in trees, we find that it ascends to the very top by means of the vessels, which are said to be capillary, and not only ascends thus far, but that it flows over their summits, so that we must admit that the process of capillary ascent is quite unable to explain the course which the sap takes in circulating through a tree.

It was this circumstance that induced Dutrochet to make the *rising of the sap* a subject of patient investigation. He was already aware of the source of the sap, and of the mode of its penetrating the tree. He knew, from experiments, that the power of sending up the sap existed in the small cone called the *spongiole*, in which the extremity of each of the *radicles* terminates. What then was the nature of that endowment which enabled the spongioles to send up the sap imbibed by them from the surrounding soil? This was the problem which the illustrious philosopher, after great labour and a number of ingenious experiments, at last explained. Proceeding step by step, M. Dutrochet came to the conclusion that there existed, between fluids of different densities, a sort of relation (depending on electrical principles), which would satisfactorily account for the phenomenon in question. He accordingly made the following experiment:—He took a portion of the large intestines of a fowl, and having well cleansed it, he half filled it with milk, putting ligatures, of course, on

the open extremities of the gut. He then placed the intestine in water. In one day (twenty-four hours) seventy-three grains weight of this water had passed through the intestine, and were blended with the milk; and after the lapse of twelve hours more, the gut became swollen with the quantity of water which it had imbibed. By and bye, however, a great change occurred; the water began to pass *out* of the intestine, and in thirty-six hours fifty-four grains of water had oozed from it.

Here then were two facts: first, the passing of the water *inwards*; next, its passing *outwards*. The explanation was quite obvious. The water in the former instance was thinner than the milk, and therefore was attracted through the intestine to it; but when the milk became putrid it was thinner than the water, and, consequently, passed out of the gut, in obedience to the same law that first sent it in. Thus then was it established, that an organic membrane, placed between two fluids of different densities, will uniformly act as the medium of imbibition or expulsion, according to the relative positions of those fluids. The imbibition is termed *endosmose*, derived from two Greek words, signifying an *impulse inwards*; and the expulsion is called *exosmose*, from two words of the same language, which mean an *impulse outwards*.

It was observed by Dutrochet, that during the endosmose the membrane was stretched very much. He concluded, therefore, that reaction would take place, and that that reaction would cause pressure upon the contained fluid, and would force it wherever there was a means of escape. Resolved to be certain on this point, he inserted into the upper orifice of the intestine a glass tube twenty-four inches long, with a bore of only one-fifth of an inch in diameter. The tube being fixed in a vertical position, the gut (which was now filled with a solution of gum arabic) was put into rain water. In twenty-four hours Dutrochet had the satisfaction of see-

ing the fluid pumping out of the tube at the top, which it continued to do for two days. Those who had the pleasure of hearing Mr. Wheeler's explanation of this discovery, will remember that his apparatus was exactly on the model of that just described, and that the fluid in the tube presented to the eyes of the whole class the same interesting phenomenon as that which rewarded the ingenuity of the inventor.

The bare knowledge of such facts as these will enable the most unlearned at once to understand, how it is that the spongioles of a root, being filled with a denser fluid than that in which they are immersed, will send their contents to the tops of the highest trees through the medium of cells and vessels, such as the laburnum and heart-wood possess. The further experiments of Dutrochet have shown, that the force here described is altogether referrible to the action of electricity. The discovery forms an era in science, for it opens a vast field of inquiry for physiologists in the animal as well as the vegetable kingdoms.

THE

London Medical & Surgical Journal.

June 2nd, 1832.

POISONING.

THE injuries occasionally inflicted on society by the professors of the healing art, through the negligence of a few, or the malice of a still smaller proportion of that body, are generally succeeded by one useful consequence : they direct public attention to the anomalous nature of that relation which the laws of the country have established between the members of the faculty and the community at large. Thus the death of Captain

Burdett last week, at Brighton (the undoubted result of carelessness the most culpable), has drawn from an authority, the best entitled in our day, perhaps, to the confidence of the community, an indignant and memorable remonstrance against one department of the code which applies to the medical profession. The *Times* of yesterday week makes an appeal to the legislature, and to that mighty tribunal of public opinion, to which the legislature should be subservient, in the following impressive language :

“ These cases occur so frequently, that we fear a severe example is absolutely demanded to awaken the compounders of medicine to a due sense of the necessity of care wherever human life is at stake. The indulgence, the all but impunity, which has hitherto characterized the administration of justice in cases of this kind, has been very injurious to society. It is a mere confusion of terms to mistake carelessness for accident; the term accident should never be applied, except to results which no care could avoid.”

The sound philosophy which suggested this reasoning is not more admirable than the basis of facts on which it rests, is true. The fatal accident to which allusion is made presented no circumstance whatever which ordinary care might not have completely overruled. But this case being at present in that state of suspense in which it is rendered sacred from all discussion, it only remains for us to express our most earnest hope that the momentary ray with which the *Times* has just illumined a narrow spot in the dark region where medical science must still be pursued, will prove the harbinger of that unclouded day, under the influence of whose light alone knowledge can be cultivated with success.

Without violating the duties which we owe to an accused party, it is certainly in our power to glance at the means by which the public may be spared a very unnecessary addition to the sources of mortality, and the profession secured from a great deal of distrust and alienation. Let it be remembered, in the first place, that the mistake at Brighton, which deprived the British Navy of a gallant officer, occurred in the establishment of a *Chemist*. A *Chemist*, as hitherto defined according to the properties which he is found to possess, and the faculties which he ordinarily exercises amongst us, would be instantly constituted such to all intents and purposes, were a street sweeper to take a shop, arrange a certain quantity of drugs in the interior, and entice a number of customers to deal with him for the same. Such is the English *Chemist*; he has nothing to do with Greek or Latin, with lectures or hospitals, with laboratories or dissecting rooms, or with Colleges or Halls; he is utterly independent of all such aids and sanctions; he is a physician by instinct; he is a surgeon at the instigation, no doubt, of some preternatural power; and he prescribes and makes up entirely from the innate light of his own untutored genius! Our law-givers, in the abundance of their humanity, continue to secure to these interesting children of nature, not only impunity, but downright protection! So that, after a little consideration, we shall not be surprised at the instances to which our attention is so often called, of mis-

takes by "compounders of medicine;" the phenomenon is, that those instances should be so few.

Whatever be the practical measures proposed for remedying the enormous evil now under consideration, it certainly will not be either just or useful to fix the responsibility of errors of this nature, at least, exclusively, on the persons who commit them. Most of these agents, from extreme youth, deficiencies of education, or other causes, are destitute of that discretion which is the necessary criterion of guilt in an immoral or an illegal transaction. That responsibility should be accumulated on the shoulders of the employer, and to him it is that the tribunals of the law should always be authorized to refer on account of the crimes or punishable errors of those whom he retains. This is the wise policy of our Statute-book, in its application to all states of society. If a coachman, for example, injure a passenger in the street, his master is the party from whom redress is to be sought;—and the value of such a principle is this, that every coach owner, for his own sake, will be sure to employ only a careful coach driver. We say, therefore, let the Legislature make the principals of those houses where drugs are in any form vended, answerable for the conduct of their servants, so far as relates to the duties which they engage to perform, because we feel an unalterable conviction that such duties will, thenceforward, be entrusted to those alone who are most likely to fulfil them with

credit to themselves, and safety to others.

The subject of the foregoing observations carries us into an extensive, and by no means a very agreeable field of meditation. Poisoning, from carelessness, is bad enough, but what are we to think of poisoning being actually encouraged by means of existing facilities for procuring and employing the poison, such as might well strike terror into the most obdurate heart? Laudanum, and copperas, arsenic, and prussic acid, may be sold at this moment by any description of person choosing to look to such a traffic for his livelihood. The green grocer, the chandler, the marine store seller, often keep one or other of some of the above articles for sale, and, taking pattern from the druggists and the chemists in their neighbourhood, politely abstain from any importunate inquiries of the parties who come to purchase a piece or a drop of poison. In all the trials for murder by poison, (which by the way were numerous at the late Spring Assizes) we find that upon the flimsiest pretence, nay, upon grounds that bore the broadest characters of falsehood, poison has been over and over again purchased for the execution of the most barbarous of crimes. We remember well being, not more than a very few years ago, at a trial at Stafford, where a monster was found guilty of administering to a young woman a quantity of arsenic, which he had bought from a *tailor* in one of the villages of the county! It is perfectly unaccountable to us how

the instinctive horror of the human mind at murder has allowed the existence, for one instant, in this country of such facilities as we allude to for its perpetration. The gin seller must make out a good character before he sells his deleterious beverage; he must obtain a recommendation to the government ere he can turn the pipe of his intoxicating butt for the gratification of his customers. But gin, according to the bitterest of its calumniators, takes about a score of years to produce a fatal influence on human life, whilst arsenic, to say nothing of prussic acid, will do as much in less than twenty minutes! And yet it is the tedious instrument of death, instead of the singularly rapid one, that is exclusively selected for the application of the cautionary and restrictive measures of the legislature!

The only excuse which would suffice to justify the licentious and irresponsible sale of the most destructive poisons, would be, that those articles, in minute quantities, become powerful agents in repressing the progress of disease, and that as the necessity for their use may arise suddenly and without the slightest anticipation, it is desirable that they should be procured with as much expedition and convenience as possible. Now, with reference to this important point, we undertake to lay it down as an indisputable truth, that the use of the known poisons may, in every instance, be postponed with impunity; at least that the employment of them may be safely deferred for the interval during

which it may be necessary to obtain the sanction of a medical man. The properties of all poisonous drugs are of a nature that admit the universal application of the rule which we have just stated. Under such circumstances, is it not obvious that an ample remedy for the existing evil is to be found in a law which would render a medical prescription indispensable to the party who seeks to purchase the poison? Would not such an arrangement put an end at once to those dreadful tragedies to which poisoning gives rise, and the description of which almost every month meets our eyes in the popular records of the time?—We answer firmly, in the affirmative—we answer from a confidence in the exactness of our information: we answer thus positively, not from any desire to impose dogmas on the minds of those whose aid in a good cause we should be most anxious to obtain; and if by our well-meant exertions, and by the skilful management in the air of our experimental little *wire*, we can draw down from the political sphere, for our own just purposes, that thunder which has proved so efficient in its native element in the work of purification, we shall ask no other reward than a good conscience is capable of extracting from a good deed.

DEATH has been busy of late in the highest places of science. M. Serullas, Member of the Academy of Sciences, has just died of cholera at Paris, after only a few days' illness,

which, however, was attended by intense suffering. He was fifty-six years of age. When twenty-two years old, he was chief surgeon in the army, and at thirty-five, first turned his mind exclusively to chemistry. To this science he devoted all his faculties, and was actually a candidate for the professorship of chemistry, vacant by the death of Laugier, when he fell a victim to the raging epidemic. He was distinguished for his generosity and kindness, and paid to science, as Cuvier did, the homage of utterly neglecting his pecuniary interests.

ON THE DIAGNOSIS BETWEEN PUERPERAL ENTERITIS, AND A TRAIN OF SYMPTOMS WHICH OCCUR FROM THE RETENTION OF COAGULAIN THE UTERUS AFTER DELIVERY.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,
WHEN I first commenced the practice of midwifery, I frequently met with symptoms very similar to those caused by abdominal inflammation, after parturition; and these I at first mistook for puerperal enteritis, but finding, upon a more extensive acquaintance with the subject, that they were relieved by a plan of treatment which could scarcely have been successful in this formidable disease, I was induced to consider if they might not arise from other than inflammatory causes. The symptoms I allude to generally occur upon the second or third day after delivery, and are as follow:—The patient complains of pain and tenderness of the lower part of the bowels, which are increased upon pressure, but not to such a degree as in actual inflammation; there is more or less fever, which is accompanied with pains in the back and loins; she is restless and cannot

sleep. The lochia, are, however, usually as abundant; but if attention be paid to the state of the uterus, it will be found, that it has a greater volume than ordinary, and that it feels hard and distended; if pressure is made upon it firmly and steadily, gelatinous clots will escape per vaginam, of which the woman is immediately sensible; this affords considerable relief to the pain, &c. When we treat these symptoms, under the impression that they arise from inflammatory causes, by venesection, calomel and opium with purgatives, &c. it is true that the patient is relieved, but what I wish to impress upon my readers is, the comparative insignificance of the one case, compared with the other, and the consequent relief from apprehension as to the dangerous nature of her case, which women are at all times apprehensive of. It is also of importance to know that bloodletting, in these instances, is not required, but that a dose of calomel and opium, succeeded by a brisk purgative, will mostly relieve the severity of the symptoms. I find it useful also to employ some stimulating application to the surface of the abdomen, over the seat of pain, and for this purpose use an embrocation composed of acid pyrolig. ʒvj. tinct. opii. ʒiii.—to be rubbed over the uterus frequently. The patient invariably expresses herself much relieved by this, and seldom is any thing more required for the cure.

These symptoms then arise from coagula distending the uterus, which excite efforts for their expulsion, and the consequent disturbance to the system; and as I conceive it is of practical importance we should be aware of the nature of the case, I may be excused directing the attention of the younger branches of my profession to the consideration of the subject, since I myself have been led into an error, under these circumstances.

The mistake is fortunately not one of serious importance, but if we are desirous of saving unnecessary pain and alarm to our patients, it is at all

times desirable we should be enabled to decide with accuracy upon their actual condition, as it will be a source of gratification to them and of their future confidence in us. I believe that a great number of the cases treated as enteritis after parturition, are nothing more than those described as above, but as fortunately the treatment for the greater evil is also unattended with danger in the minor one, the mistake is not discovered. It is not to be supposed that I imagine the distinction has not been pointed out, between afterpains, as they are called, and those arising from inflammation; my object is to fix the attention upon a train of symptoms, which if not properly attended to, are, and may easily be, mistaken for those of inflammation, for the pain does not occur at fixed intervals, but is constant and severe, and besides gives rise to a much greater disturbance to the system than mere afterpains do. I wish to observe also upon the great relief to be obtained from rubbing the surface of the abdomen with some stimulating and anodyne application, which alone is of sufficient importance to deserve that notice which I am not aware it has hitherto received.

I am, Gentlemen,

Your obedient servant,

JAMES CUMMING.

28, Tavistock Place.

ON THE COURSE OF STUDY AND EXPENSE REQUIRED FOR TAKING A MEDICAL DEGREE IN AMERICA.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I AM indebted to a medical friend for the following information respecting the system adopted, and expenses incurred, in obtaining the degree of M.D. in America. Perhaps the information may be useful to those who are on the eve of emigrating to that country; if so, you are at liberty

to publish this letter in your excellent Journal. It may be as well to observe, that the American faculty do not draw that refined and arbitrary distinction between medicine and surgery that exists in this country. All who are legally qualified to practise are entitled to the appellation of *Doctor*, it remaining optional, of course, whether the individual combines the practice of medicine with surgery, as the general practitioners do in this country, or whether he practises exclusively medicine or surgery. With respect to rank, no foolish distinctions are made between the individual who confines his attention to the external, and the doctor who treats internal diseases. The following are the conditions, says the gentleman to whose kindness I am indebted for the following information, to be fulfilled by those who desire the diploma of the Ohio College. The aggregate expense of the tickets, including matriculation, is one hundred dollars, and the cost of graduation twenty-five dollars, amounting altogether to TWENTY FIVE POUNDS STERLING. The requisitions for candidates are,—

1. Satisfactory certificates of having studied medicine with some respectable practitioner for three years, and of having attended two full courses of lectures, or

2. Of having attended three successive courses of lectures, and studied as before all the time between them, or

3. Of having been in regular and respectable practice four years, and of having attended one full course of lectures.

Such are the easy terms upon which any young man may arrive at the dignity of *Doctor*! Should any individual possessing a diploma from a legally constituted medical body wish to settle in America, he can immediately, by application to any of the Medical Colleges, obtain, for a very trifling fee (five pounds I believe), a degree of M. D., without undergoing any examination. Why do not the Apothecaries' Company in this coun-

try act with the same liberal spirit? In this country, if an American, or a Frenchman, or a German, should wish to practise physic, he cannot legally do so; and why so? Because, forsooth, he is not a member of our Medical Corporations. If he presents himself, and offers to pay all the fees, and to undergo the most rigid examination, it is all of no avail, he is not entitled to an examination, more especially before the Court of Apothecaries, because he has not served a five years' apprenticeship with one of their own body!! Would not the object of the Apothecaries' Company be answered as well by requiring the candidate to produce a certificate of having been engaged under the superintendence of a respectable practitioner in the study of medicine for two or three years? Why require him to waste the vigour of his youth behind the counter of an apothecary making pills and compounding mixtures? I hope the time is fast approaching when the Apothecaries' Company will perceive the necessity of keeping pace with the liberality of the age, by altering those regulations which, while they are productive of no utility, press hard upon the poor student.

I am,

Your obedient Servant,

FORBES WINSLOW.

May 21, 1832.

[The Colleges of Physicians and Surgeons in London, Dublin, and Edinburgh, with one exception, which we shall immediately mention, are equally illiberal. The re-examination of a graduate in medicine, or a member of any legalized College of Surgeons, of any University or College of Surgeons, in these or other countries, is a direct insult to those professors who have granted such testimonials; and is an illustration of that narrow-minded and selfish tyranny which characterized the dark ages. We beg to inquire, is there any one so stupid as to suppose that a French, or German, or American

physician or surgeon is not as profoundly versed in the science of medicine as a British, or *vice versa*? Are not the principles and practice of medicine virtually the same in all civilized countries? But there is one exception to the charge of illiberality, of which our valued correspondent justly complains, and that is, the Edinburgh College of Physicians. A doctor of medicine of any British, and we believe of any foreign University, is entitled to admission into that College, on presenting his degree and paying the fee, and without any re-examination. The fee is large—76*l*. The reader must not confound the Edinburgh University, and College of Physicians; the one grants degrees after several rigid examinations; the other admits those who have obtained them on the terms already stated.

The London and Dublin Colleges of Physicians, on the contrary, are so fond of a little brief authority, that they re-examine regular graduates; and to render the thing as oppressive and contemptible as possible, some of the examiners are often of much less standing and reputation than those whom they have the consummate folly to subject to their interrogations. It would appear invidious to particularize individual examples; but the fact is so notorious that it requires no proof.

Again, is it not the greatest hardship that an apothecary, who has received a legal qualification in Dublin or Edinburgh, cannot practise in England or Wales without recommencing his studies, in compliance with the regulations of the London Company for their examination? Neither can a licentiate of the London Company practise in Ireland nor Scotland without being first re-examined by the Companies in these parts of the kingdom. One would think that pharmacy in London, Dublin, and Edinburgh, was not the same science, and that the medicines in use in Great Britain and Ireland were not all supplied from the London market, and that there must be an

immense discordance of opinion in our three pharmacopœias. If this state of things does not require reform, we really do not know what does.—Eds.]

Hospital Reports.

HOPITAL DES VENERIENS.

Abscess in the abdominal Parietes; Excrescences on the Labia majora; frequent relapses; but no derangement of the general health.

JOSEPHINE CHATEAU, aged twenty-six years, lace maker, prostitute, born at Versailles. and domiciliated at Paris; entered this hospital, and staid in it twenty-two days.

Josephine, born of parents in an inferior, though decent way of life, became an orphan at fourteen years of age. From Versailles she came to Paris, accompanied by another girl aged fifteen; insulated, as it were, without support, not calculating on the future, and not knowing how to relieve their pressing wants, they commenced a career of prostitution in the neighbourhood of the corn market, which served them as their first sphere of action.

A year passed away, and Josephine Château was for the first time affected with syphilis. She applied to M. Cullerier, with two abscesses, the one situated on the right side of the abdomen, on a level with the umbilicus, and the other at the anterior union of the labia majora. Her stay at the hospital of the Capuchins was four four months; she was for a long time dressed twice a day with *pledgets of lint covered with cerate, emollient fomentations, and seat-baths*; this constituted the *local* treatment; the *general* consisted in the administration of *Van Swieten's solution*; she then left the hospital, apparently free from any syphilitic taint. In eight days, however after, she was again returned to the Capuchins, by the Prefecture of Police, affected with excrescences,

Her second stay at this hospital lasted eight months; and during this long time the warts were constantly excised twice a week by M. Bard, who also employed the solution in increased doses. The excrescences continued, and mercurial ointment was ordered to be rubbed in on the inside of the thighs; she used in all four ounces and six drachms of the ointment. These frictions were hardly ended, when she was attacked with gastric irritation, which yielded to the application of twenty leeches. She was discharged, but enjoyed her liberty only fifteen days; in this short interval she indulged too freely in drink and coition. She was returned to the hospital, and, on examination, a number of small white warts were observed, which, as she affirms, never communicated any contagion to those with whom she had connexion; though she says she had often had intercourse with the same individuals, she never heard any complaint, nor ever found upon them any trace of syphilis. She remained this time four months in the hospital, always in the police wards. The mercurial treatment was varied, since the same symptoms appeared to continue, notwithstanding the means formerly adopted; 130 pills were administered to the patient, the vegetations excised every Thursday, and cauterised either with the *muriate of antimony*, or the *nitrate of silver*; immediately after the excision, warts formed about the anus; a tent, covered with *ceratum plumbi*, was introduced into the rectum during the greater part of her stay here. She was again discharged, but after three months' liberty she renewed her application for admission, and was again received. The excrescences had again reappeared, and during the time she remained here, five ounces, four drachms, and two grains of mercurial ointment were rubbed in; and the warts were excised and cauterised.

Josephine Château had never enjoyed more than fifteen months liberty since her fourteenth year, the age at which she became a prostitute. These

fifteen months terminated at the end of her last stay, when she presented herself to the hospital only for a slight excoriation, which disappeared by the use of *cold water lotions*, and which only detained her in the hospital twenty-two days. In all the circumstances of her syphilitic affection, vegetations only were observable; and for this disease, which some consider as always the same, and others as a renewed affection, she was put under nineteen courses of mercurial preparations, both at the Venereal Hospital, and La Petite Force—namely, of the solution ten courses, the minimum of which was 32 doses, and the maximum 45; of the pills six, the least 120, and the most 220; of mercurial inunctions three courses, the minimum 3iv. 3vj. , and the maximum 3v. 3iv. gr. 7.

These remedial means were never in any way eluded, because they were administered in presence of the physician, and the frictions were performed under the eye of the *Elève de Garde*, during an hour.

Of an ordinary size, and a sanguineous temperament, Josephine has always enjoyed very excellent general health; the catamenia are always regular, no pains in any of her limbs, or in any organ; her teeth are entire and perfectly sound, and she has never been salivated. She indulges, however, habitually in excess; she drinks at least, four times a month, six bottles of wine in a day, and she hesitates not to indulge in spirituous liquors. She adds that she has sustained, with the usual immunity of women of that class, the embraces of eight individuals in a day, some of whom have, during the night, renewed coition six times; and she adds further, that she never passes twenty-four hours without connexion. She declares, at the same time, that she rarely experiences the enjoyment which she stimulates. She says, she once abandoned prostitution, but, however, she could not persist in this happy disposition, and conform to the formalities of the police, which re-

quire "that every prostitute who desires to be erased from the register, must present herself with a relation, or two witnesses, who will attest that she is resolved to renounce prostitution, and that she is able to maintain herself."

Ptyalism cured by Opium.—Return of salivation after many years, with mercurial odour, proving that the deleterious effects of mercury may lie long dormant in the system.—Mercurial and non-mercurial treatment of syphilis.—

It is surprising how much valuable information may be comprised in a few words. Dr. Graves gives a detail of the facts at the head of this article in two pages of our valued contemporary, the *Dublin Journal of Medical and Chemical Science* for May. He states, that a middle aged woman had laboured under profuse leucorrhœa, followed by anasarca, and by this irritability of the stomach, and finally obstinate vomiting. Both the last affections suddenly disappeared, and were followed by profuse ptyalism, which defied all ordinary remedies. The quantity of viscid mucus secreted by the mucous membrane of the fauces and back of the pharynx, and expelled by hawking, renewed every two or three minutes, and continued day and night, was a pint and a half in 24 hours. The throat and fauces were pale, and the salivary glands unaffected. The appetite was bad, skin dry, countenance haggard and emaciated.

The well known good effects of opium in several diseases of increased secretion, diabetes, diarrhœa, and certain forms of dropsy, suggested its trial in this case; a grain was given every fourth hour. The woman slept the whole night, and next day had no return of the spitting; the effect astonished her, and some medical students who reside in her house. The disease returned, however, but was always dispersed by opium.

Dr. Graves relates the case of a lady who had taken a large quantity of mercury many years ago, and has

ever since been subject to occasional returns of salivation, with mercurial odour. This is brought on by exposure to cold, which is followed by sore mouth, redness, and swelling of the gums. Several such cases have been recorded, and prove that the deleterious effects of mercury may lie dormant in the body for a long time. Dr. Graves is of opinion that mercury can cause a train of symptoms not dissimilar to those of secondary syphilis, and that the latter may in general be cured without mercury, but if unusually obstinate we should employ it.

He has seen periostitis occur after salivation. Venereal symptoms may not yield to mercury, in consequence of some constitutional peculiarity, or an injudicious use of that remedy, and thus the constitution labours under a modified disease resulting from the combined effects of the two poisons.

NOTICES TO CORRESPONDENTS.

A Pupil of the Little Windmill School.—The subject referred to cannot be of the slightest interest to any of our readers; and, moreover, the statements should be authenticated by the name and address of the writer. He can hardly suppose that we would insert anonymous communications of a personal nature to indulge the fancy, or, perhaps, the spleen of a writer, who withholds his name from fear of the consequences.

A King's College Student.—We shall insert the communication with this signature, if the writer communicates his name confidentially.

Prizes of the London University.—It was Mr. Lanyon, of Camborne, Cornwall, who was the successful candidate for the gold medal of the surgical class in the London University, and not Mr. Layon, of Bristol.

Freedom.—The strictures are just, but too personal upon the physician of the institution. Our correspondent has a fine field for general remarks on the abuses to which he alludes, without naming individuals.

A Georgian.—Many thanks for the communication, which will appear in our next.

Other Correspondents next week.

List of Books for Review in our next.

ERRATA.—Page 549, for "elutaus," read *glutæus*; for "sartoruis," read *sartorius*; for "in the," read *with*.

London Medical and Surgical Journal.

No. 19.

SATURDAY, JUNE 9, 1832.

Vol. I.

SELECTIONS

FROM THE

CLINICAL LECTURES,

DELIVERED AT THE

HOTEL-DIEU IN PARIS,

During the Session of 1831 - 32 ;

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

Diagnosis—Dislocations of the Hip.

THE diagnostic of fractures of the neck of the thigh bone is not without great difficulty, and the best surgeons are often obliged to arrive at an uncertain judgment. There are some persons who present all the rational signs of this injury without its presence; and others on the contrary, who offer no sign when it really exists. A fall on the hip will contuse the muscles and the articulation, and simulate this fracture; and though the same cause may produce fracture, the person rises and walks. Even persons have had the neck fractured and regained the use of the limb without any shortening, and the fragments have not been displaced for two, three, five, ten, or thirty days, and then by some movement of the patient, during which time the nature of the injury was unknown. What is the cause of this peculiarity which authors have signalized, and which I myself have often observed, and of which Sabatier makes mention in the *Memoirs of the Academy of Surgery*, in which he has cited several examples? It arises from this, that the fracture has occurred in the articular capsule, the fragments rest in their place, the inferior pressing upon the superior. But it shall be said, how is it that after such a length of time, the displacement occurs, and the fracture becomes evident? It is because the relative position of the fragments change, either by the weight of the body, or by muscular action, or by the wear-

ing of some of the fragments. The shortening and deviation of the limb, which supervene on the displacement of the fragments, leave no doubt of the existence of fracture, if there has been no other cause but a fall some days before. The two preceding signs do not manifest themselves sometimes sooner than after fifty, sixty, or eighty days of treatment by extension and repose, and are then known by the yielding of the callus to the contraction of the muscles or weight of the body.

Before I proceed further, I shall say a few words on the causes of this consecutive displacement.

It is known that in the early period of the formation of the callus of the body of the long bones, the union often yields and produces deformities in fractures which were perfectly adjusted, and when a cure was hoped for, without any accident. Who has not seen in oblique fractures of the femur so difficult to be maintained with exactitude, that the callus yields to the weight of the limb, and deforms it when the patient attempts to walk, at a time which appears too distant for the slightest apprehension?

This is what exactly happens in fractures of the neck of the thigh bone, in which there has been no displacement at the early period of the injury, or when the displacement was slight at first. At the end of two or three months, the provisional callus yields to the weight of the limb on which the patient supports himself, and the fragments cease to be in apposition, a deformity takes place, and a shortening is produced. I have seen those shortenings take place at the end of two, three, four months, and even later. From the observation of these facts there results an important indication, to which I shall direct your especial attention, that it is necessary to keep patients in the apparatus destined for fractures of the neck of the thigh bone, during 100, 120, 140 days, or even more, so as to give the callus time to acquire sufficient solidity.

The weight of the limb, but above all that of the body on the broken member, ought to

be regarded as the great cause of displacement, whether primitive or consecutive, carrying the superior fragment inferiorly, and the inferior superiorly. But an active power of displacement consists in the prolongation of the action of the cause which occasioned the fracture, the same cause produces the most remarkable effect. When it is carried too far, it forces the superior fragment into the spongy tissue of the upper extremity of the inferior fragment, and consolidation rapidly takes place in this situation. There will be deformity, shortening, and permanent deviation of the inferior member, and in a direction which will vary according to the point at which this anormal union occurs. It may happen before or behind. Here the shortening of the inferior member takes place in the spongy substance of the inferior fragment.

Many pieces of pathological anatomy are preserved at the Museum of the Hotel-Dieu, and represent fragments consolidated in this manner, have been exhibited in this amphitheatre, and have convinced every one of the reality of this interesting fact. It is useful to note this cause of deviation, it accounts for some exceptional facts of deviation of the foot inwards, in fracture of the neck of the femur—exceptional facts, which have been observed by many authors.

In fine, there exists another, and the last cause of displacement of the fragments in fracture of the neck of the thigh-bone; a cause incessantly acting, and against which the surgeon always directs his efforts, to prevent vicious consolidations and deformities—I mean muscular action. It is this which explains that displacement most readily occurs when the callus is not as yet formed. This consideration very properly sanctions the division of the symptoms of fracture of the neck of the thigh-bone into primitive and consecutive, according as the shortening occurs before or after the formation of the callus.

The primitive symptoms exist when, in a fall on the heel or knee, the shortening and deviation occur at the instant; in this case the superior fragment rests in its place, and the inferior ascends; but a vertical fall is the rarest cause of fracture of the neck of the femur; and in falls on the great trochanter, which are commonest, the limb is elongated. There exists another cause of shortening, which until our time was little known, and badly indicated. We attribute it to the action of the great muscles, the middle and small glutæi; but by rotation outwards these muscles are put in a state of relaxation, which is so with those which cause the deviation. The muscles of the legs and hams are considered as favouring this displacement, but they have no more influence than the others; for the relaxation, as that of the glutæi, is determined by rotation outwards. When the limb is placed on an inclined plane the glutæi muscles are extended, and, nevertheless the deviation ceases naturally. But it is to the

adductor muscles, attached to the pubis and ischium, are due the deviation and shortening. These two symptoms appear when the patient makes muscular efforts to rise, or they follow a slight tonic contraction of these muscles, which do not give much resistance in the inferior fragment. It is this that causes the shortening after the formation of the callus, when the patient executes movements to rise up or walk. The action of the muscles, and the weight of the body, are then the real causes.

Let us pass to the enumeration and appreciation of the symptoms, which will furnish us with important indications.

When there is displacement the fracture is easily recognised, but when there is none it may be suspected, without, nevertheless, our being able to decide with certainty. I suppose that the symptoms are well characterised, that there is shortening, deviation of the limb outwards, impossibility of rising from the bed. It is still necessary to ascertain if the limb preserves its shortening, or if it is destroyed by extension; if the great trochanter revolves on the axis of the femur, or on the extremity of the lever.

If the shortening is only a few lines, it is difficult to distinguish it from that produced by an accensional movement of the pelvis, the result of contusion; the diagnostic becomes more evident if it is of half an inch or an-inch, &c.

Persons have attributed an old shortening to a recent fall, in order to induce the surgeon to attempt a cure; but an attentive examination will invariably enable him to arrive at the truth. When the displacement is not of long standing, but recent, it may be produced by luxation of the femur, or an ascension of the pelvis; here we must be cautious not to be imposed upon.

In the luxation forwards, the head of the femur passes on the horizontal branch of the pubis, elevating or lacerating the vessels or nerves; then there is shortening, but there exists before the pubis a hard tumour, which moves on rotating the femur. In the luxation in the sub-pubic, or ovalar region, the limb is still turned outwards, but is elongated, and here there is a thickening, resistance, and unaccustomed tension of the muscles; the hip is depressed, but projecting in fracture.

In the luxation above and outwards, the head of the femur is in the external iliac fossa, the limb is shortened, but the foot and patella are turned inwards, the heel and the ham outwards.

It is true that in some cases of fracture the limb is turned inwards. Ambrose Paré, who was the first that described this disease, reports that he was sent for to a lady whose limb was short, and the great trochanter on the os ilium; he believed it was a case of luxation of the femur. He made efforts to reduce it, and applied a bandage; but after some days violent pains came on, the limb

shortened itself again, and he found that the foot was turned inwards. John Louis Petit cites a similar case in his work on *Diseases of the Bones*. Bichat stated that Dessault considered this variety very common. I have only seen one case or two, and I think Bichat must have committed an error. But as this deviation inwards has been observed, what are the means of distinguishing fracture from luxation upwards and outwards? In the luxation, the round head of the femur is in the external iliac fossa. In fracture we can readily rotate the leg; in the former our efforts will be useless. In the luxation, we cannot elongate the limb without reduction and great efforts; but once reduced, there will be no farther displacement. In the fracture slight efforts will elongate the limb to its normal state, but displacement will immediately occur as soon as we suspend our efforts. It is therefore impossible to confound the two cases.

Lastly, there is a luxation downwards and backwards, which I have observed two or three times only; the limb is turned inwards, is sometimes a little lengthened; it cannot be brought to its natural position, except by efforts at reduction, and once reduced, the displacement is not produced again.

The grand distinctive character consists in the following difference: the shortening produced by a fracture yields to a slight effort, but that produced by dislocation is removed with difficulty, but when once removed it does not return without great force, such as that which first produced it being used.

Disease of the hip-joint may produce shortening of the limb, but this cause is easily discovered. Conscripsits simulate shortening and luxation of the limb, by walking on the point of the foot and elevating the other hip; the foot is turned outwards in fracture.

But it often happens that shortening will supervene after contusion of the hip, where there is no attempt at imposition. In such cases place the patient on a table, and apply a rule across from one anterior superior spine of the ilium to the other. If the shortening is produced by pain and contusion, the anterior spine of the affected side will raise itself above the other; elevate the depressed hip, and depress the other, and all shortening will disappear.

Let us now examine the deviation in which the point of the foot and patella are turned outwards, and the heel and ham inwards. When a person lies on the back, there is a distance of eight or ten inches between the toes of each foot; but in fracture the foot lies on its side, the heel is turned towards the opposite ankle, and the ham towards the knee. The contrary deviation of the foot inwards is of rare occurrence; it may be reckoned 1 in 100.

We have already explained the mode in which the deviation outwards is accomplished, but if the action of the adductors explain it

well, it is also right to say there is another cause of deviation inwards, the obliquity of the fragments. If the body of the femur is fractured obliquely from below upwards and from before backwards, the point of the inferior fragment will be carried backwards, that of the superior before, and *vice versa*; well, in the fracture of the neck, if the internal fragment is carried backwards and the external forwards, there will be then deviation outwards; if on the contrary the fracture is oblique in the inverse sense, the deviation will be inwards; it is then by the obliquity of the fragment that these varieties of deviation can be appreciated.

After having spoken to you of the symptoms, it is natural to apprise you of the results of fractures abandoned to themselves; and finally to explain the treatment. I have constantly seen patients affected with fracture of the neck, who did not fail to present shortening of one, two, three, or four inches, and the deviation of the foot outwards, which rendered progression difficult; the great trochanter was elevated, approached the crest, and was directed backwards. But that which is especially to be known is, that a false joint is formed in the external iliac fossa.

Let us now inquire what are the material effects of fractures on the bones, commencing by the cotyloid cavity or acetabulum. I have two or three times observed that cavity fractured by the head of the femur: this accident was produced by a fall on the feet or knees. In such cases the head of the femur props the bottom of the cotyloid cavity, and as it offers more strength than this, it breaks it. The most remarkable case of this kind which I have observed was this; the bottom of the cotyloid cavity was fractured, and the injured head of the femur was passed entire into the pelvis; the neck which was unbroken, was so forcibly engaged in this opening, that it was extremely difficult to withdraw it and reduce this new species of luxation. At an early age, the effort exercised on the bottom of the acetabulum, can disunite the pieces of which the coxal bone (os innominatum) is composed, the point of union of which corresponds to the centre of the cavity.

In other cases the cavity is fractured without the head of the bone being displaced; but the most ordinary effects of fracture are perceived at the superior extremity of the femur. One of the first effects is a stellated fracture of the head of the femur, the neck remaining untouched. This case is very common in falls on the great trochanter, or on the soles of the feet, but more so when direct injuries are inflicted, as by fire-arms. I have had occasion to see a dozen cases in the month of July. I have remarked that it has often happened that the head of the femur having broken in pieces, the neck remained entire; there was no displacement of the fragments, no shortening of the limb, no deformity. This fracture may be mistaken for violent

contusion of the articulation, and treated by general and local bleedings; in general it is unknown; the patients recover without deformity, and it is only when death arrives that its real nature can be determined.

The neck is oftener the seat of fracture, because it forms a lever, its thinness in the middle also favours a solution of continuity; sometimes it is broken near the head of the bone; the more ordinary fractures take place in the weakest part of the bone. This fracture may occur from below upwards, or from above downwards; at other times it occurs anteriorly or posteriorly; this depends upon the manner in which the fall takes place, the body being more or less inclined, or in an inverse sense. But the commonest fracture is seen at the base of the neck, as this results from falls on the great trochanter, which I have observed to be partial or complete, the neck being entirely separated from the body of the bone. When the trochanter resists the effect of the fall, that which most commonly occurs is a fracture of part of this eminence directed towards the small trochanter, and appears to be more at the superior part of the body than at the neck of the bone. Sometimes the fracture proceeds from the less to the great trochanter, or from the great, to the neck of the bone.

MR. HETLING'S
SURGICAL LECTURES
AT THE
BRISTOL INFIRMARY.
Session 1831-32.
INTRODUCTORY LECTURE.

(Continued from page 556.)

INTRODUCTORY LECTURE—(concluded.)

I AM aware of imperfections in regard to arrangement and style; and, as Dr. Elliotson has well observed, if any person may justly claim the lenity of criticism, it is a medical lecturer, who writes frequently from lecture to lecture, and always under circumstances in every way hostile to correct composition. In truth this is really my case at this moment, in consequence of having been so very unexpectedly called upon on this subject. Lectures, therefore, ought never to be rigidly scrutinized in respect to manner or language, because they are not only frequently delivered *viva voce*, but without the advantage or design of much study or correction. If I shall be found, however, to have afforded you improvement, I shall not regret having presented to your notice a series of lectures which, by delay, might have been less liable to the severity of criticism. I wish it, how-

ever, to be understood, that this does not arise from any exertions having been wanting, or pains having been spared; but from my being engaged in a profession, the necessary acquirements of which are attended with so much difficulty, and the duties of which deprive me of that portion of leisure which otherwise should be particularly devoted to the objects we have in view. My engagements, however, are attended with this advantage, that they afford me the constant opportunity of improvement, and of selecting interesting cases for our investigation, and of accumulating fresh facts to be discoursed upon. My lectures, therefore, are not to be considered merely as lectures of compilation, but consisting of an exposition of facts, the knowledge of which has been derived from actual observation, and of the application of them to the improvement of our knowledge in surgery.

I take this opportunity of disclaiming, except in a few instances, all pretensions to originality. I have availed myself freely of the practice and writings of the best authors, and of extracts from their works. The only apology I shall offer for this liberty is, that I have considered it the most useful and honest method of communicating information. Having made this acknowledgment, I shall proceed to say something with respect to the object and advantages of lectures in general.

If lectures were perfectly composed and delivered, they would supersede the necessity of books of any kind; and, on the other hand, a well-selected course of reading would be very little inferior to oral instruction, except with regard to the inspection of preparations, and the practice of dissection and operations. But in a pursuit so extensive as that of surgery, it is necessary to employ each of these modes of study, with almost as much diligence as if we depended on it entirely for information; and it becomes desirable that a course of reading should be pointed out, which may either be adopted collaterally with the attendance of lectures, or subsequently to it, or in both ways. Accordingly I propose occasionally, at the conclusion of a lecture, to present you with a list of the names of those authors on the subject that, in my opinion, are most worthy your attention. At the same time allow me to observe, that both hearing and reading, unless extended into practice, only teach men the art of talking and writing ingeniously; but talking about diseases, and knowing how to cure them, are distinct and very different things.

In giving lectures on surgery there is but little expectation of originality, as few teachers now-a-days pretend to any wonderful discoveries. The chief value, therefore, of an attempt that aims at the instruction of students, consists in a judicious selection from all the facts already known; in the novelty and arrangement of the materials; or in the inductions made from the most important truths

they contain. "Truth," as Lord Bacon has said, "is not the child of authority, but of time, and were we to allow ourselves to suppose that nothing more or new could be taught, it is pretty clear that nothing more or new would be learnt." This illustrious man was of opinion that the foundations of knowledge are, *observation, experiment, and analogy*. By observation, facts are distinctly and minutely impressed on the mind. By analogy similar facts are connected. By experiment new facts are discovered; and in the progress of knowledge, observation, guided by analogy, leads to experiment; and analogy, confirmed by experiment, becomes scientific truth. Lord Bacon was the projector of a plan for conducting the researches of philosophy upon the most accurate and comprehensive principles. He proposed to substitute experiment for conjecture, and laid down the principles of genuine philosophy, not formed upon hypothesis, but truth and experience. This mode of inductive reasoning, so superior to the philosophy of the ancients, will be found highly conducive to a just and rational mode of obtaining correct ideas of the subject we are pursuing.

There is nothing can retard the advances of any art more than too much apprehension about its mysteries and difficulties. There is no art, it may be maintained, so perplexed and difficult, that, by human industry and research, steadily and properly exerted, cannot be rendered more clear and practicable: to accomplish this, however, time must be allowed.

What perseverance and an union of efforts have accomplished is familiar. It has been well observed by an elegant writer, that "all the performances of human art, at which we look with praise or wonder, are instances of the resistless force of perseverance; it is by this that the quarry becomes a pyramid, and that distant countries are united by canals. If a man was to compare the effects of a single stroke of the pick-axe, or of one impression of the spade, with the general design and last result, he would be overwhelmed by the sense of their disproportion; yet these petty operations, incessantly continued, in time surmount the greatest difficulties; and mountains are levelled and oceans bounded by the slender force of human beings."

We shall therefore commence with the most simple and general principles, and by proceeding through proper media to the conclusion, from cause to effect, from things general and universal to things particular and occasional, thus gradually advance to the investigation of more complicated phenomena. This is the plan which I have adopted in the investigation of the subjects I am endeavouring to explain to you.

To conclude, gentlemen, in the language of the late Mr. John Bell, "The period of probationary study in our profession is too limited to be abridged. Six years is but a short space

indeed for acquiring an accurate knowledge of the human body, and a general view of all the departments of medical science; if this be abridged or wasted in trivial occupations—if a student thus insufficiently educated, who knows no other ambition than to be able (from a short catechism) to answer by rote the questions that may be put to him at the College of Surgeons—if a young man of this description succeeds in passing for a surgeon, and no further opportunities be provided for him of mixing study with practice, or of gradually being made acquainted with the great charge he has undertaken, dreadful consequences must ensue. When once entered upon the profession, its duties and its interests admit no pause. If the short period of preliminary study be abridged, every step towards farther improvement, every act by which practical skill is acquired, though meritorious in other professions, cannot be guiltless in ours. A young man who rushes unprepared into practice, must be aware that he is acquiring knowledge at the expense of the health and feelings of a fellow creature; must be often conscious of having occasioned pain which might have been spared—of having lost that life, which a little deliberation and constancy in study might have enabled him to save."

It has been imagined that when a student has passed the usual routine in lecture-rooms and hospitals, and has learned the art of dressing sores, of applying bandages, and performing operations with a little dexterity on the dead subject, that he must necessarily be an accomplished surgeon. A conclusion so gross and fallacious scarcely needs refutation. An education so limited and confined, affords but a very scanty harvest to a student desirous of being considered a scientific surgeon. He who wishes to practice with probity and success, must study it both as a science and an art, for a man destitute of principles is little better than a surgical automaton.

The first of all talent is to form a just estimate of our duties, and to prepare for acting a conspicuous and honourable part, by setting up some model of imaginary, or real perfection, as the object of our imitation. It is a proof of genius to form a high conception of the office and duties to which life is to be devoted: and it is an amiable trait of greatness in a young surgeon, who is to be the friend and comforter of his fellow creatures, in hours of pain and anguish, to form an exalted one—to set before himself some illustrious example, so that, by aiming at ideal excellence, perhaps beyond his reach, he may at least attain to what is good and estimable. The forming a just and dignified conception of the duties of a professional life, is the great and regulating talent from which all diligence and enthusiasm must flow.

When you come into practice, let your liberal conduct give the lie to those who conceive the profession to be mere craft. Neither encourage a spirit of self-depreciation, nor

seek to acquire a surreptitious fame. Avoid the pedantic peculiarities of the mannerist, the pomp and circumstance of physic; but recollect at the same time that an unaffected manner may often be made lawfully to act in aid of its duties. Scientific and effective practice, it has been rightly said, involves more than a mere acquaintance with the rules of surgical prescription. To be accomplished for practice, is to have a mind stored with all kinds of knowledge applicable to his profession; and a young man should gradually rise through all the dependencies of study—should pass through the history of his profession, before he can be capable of understanding those conclusions which we call rules of practice. He should know the period at which each interesting practice began, in what countries it has prevailed, and by what authors, and by what kind of reasoning, each rule in our general code is supported. For each rule is to be received with limitations and exceptions, with a degree of diffidence or confidence proportioned to the authorities or proofs which it brings along with it. To deliver rules, unqualified and absolute rules, into the hands of an untaught man, were to put a two-edged sword into the hands of an idiot.

A young man depending solely on his native powers, is soon taught to feel the importance of knowledge, and becomes conscious that his fortunes must rise on his reputation; that he must struggle upwards, perhaps through enmity and obloquy, to eminence and employment. During his attendance at a hospital his hours are not occupied by unworthy employment; he associates with the studious, and devotes for a period his whole mind to the uninterrupted pursuit of his profession, and such accomplishments as suit his future station in society. Nor, when his studies are complete, does he abandon his early habits, which are his delight and pride, to rush at once, though not unprepared, into practice. He is careful to maintain a reputation in science; to improve it by diligent reading; to be found employed in respectable studies in every interval of practice. While his practice grows slowly, he has leisure to reflect, to improve, and add experience to learning; he has been too long proud of his acquirements in science, to allow any thing mean or ungenerous in the practice of his art.

Thus we may trace a young man of independent principles, till he arrives at mature years, to a high station in his profession; with improving talents founded in study, refined by experience, and recommended by generous and honourable principles. This is a process fit to form a man worthy of our profession.

By this time, I presume, it is apparent that I have gleaned from the best authorities for your benefit, and blended with them my own views, in respect to medical education and conduct; it therefore only remains for me to offer this effort to your consideration, as a

further proof of my anxiety that you should become fully sensible of the importance and dignity of the profession, of which you expect shortly to become members. I therefore repeat that I shall witness, with peculiar satisfaction, an increased zeal and spirit among you for the establishment and support of a medical school. Public instruction can be effectually imparted only by public munificence; and it will not be disputed that the science of medicine and surgery has not only the first claim to the patronage of their own particular votaries, but upon society in general.

I have now, gentlemen, concluded the introductory part of the lectures I am engaged in preparing for your use; and as this is the commencement of a new and important undertaking, I trust you will not disapprove of my having judged it proper, in the first instance, to be more than usually diffuse and explicit.

I have just said that the student, to be accomplished for practice, should have a mind stored with all kinds of knowledge applicable to his particular views. That he should gradually rise through all the dependencies of study, and pass through the history of his profession, before he can be considered capable of understanding those conclusions which we call rules of practice. It was also the precept of an ancient philosopher, that he who undertakes to extend the limits of a science, should previously be made acquainted with the discoveries of his predecessors. We are told that Mr. John Hunter, in consequence of the neglect and irregularity of his early education, attained but little acquaintance with the literature even of his own profession; and that in consequence it not unfrequently happened, that upon communicating a supposed discovery of his own to some one of his more erudite friends, he had to suffer the disappointment of learning that the same thing had been already found out by some other well known anatomist or surgeon,

Besides, it is customary with most lecturers who treat on any science, to precede their elucidations by a history of the subject, *its rise and progress*, and an account of the persons who have previously distinguished themselves in the attainment of it. The lives of those who have risen to the highest eminence in any art or profession, cannot fail of exciting an interest in the minds of *all*, even such as are uninformed in the technicalities and mysteries of the profession itself.

I propose, therefore, in the next two lectures giving you a *brief history of ancient and modern surgery*. I shall then proceed with an interesting enquiry concerning the phenomena of *animal life*; and then enter upon the first and paramount leading disease in the whole range of surgery, I mean *inflammation*, with its different terminations by resolution, effusion, adhesion, suppuration, mortification, ulceration, erysipelas, carbuncle, &c. and treatment. Wounds—punctured, incised,

lacerated, gun-shot, poisoned, &c. Structure and diseases of arteries—hemorrhage, ligatures, &c. Aneurism, &c. &c.

SELECTIONS
FROM
THE SURGICAL LECTURES

Delivered in St. George's Hospital,

BY

B. C. BRODIE, Esq. F.R.S.

*Healthy, Indolent, Sloughing, and Irritable
Ulcers.*

GENTLEMEN,

I INTEND only to make a few general observations upon healthy, indolent, sloughing, and irritable ulcers; for I shall have to speak to you at some future time more at length upon particular ulcers. It is somewhat difficult to define accurately what an ulcer really is. We say a part is ulcerated when some portion of it is absorbed, and the surface is suppurating. Internal ulcers come more particularly under the care of the physician. Ulcers, I say on the external skin, not depending on any poison, are very difficult to describe, on account of the great variety of appearances connected with them that present themselves. First then we will speak of

Healthy Ulcers, such as may be caused by the application of caustic, or an incision by a knife. These ulcers secrete a thin white pus of the colour of cream; the granulations around them are small, pointed, and of a florid red colour. For the most part an healthy ulcer will heal of itself; but it is in general the better surgical practice, to apply simple dressing to the part, and put on a roller, as this will prevent the ulcer scabbing. When the ulcer is of a large size, you will be able to heal it better by the application of stimulating liniments. These are of various kinds, but in applying them you have always one end in view; you may use a solution of nitric acid, or of sulphate of zinc, or of sulphate of alum, or sulphate of copper; but perhaps you will find none of greater service than the following:—

R *Argenti Nitratis*, gr. ij.
Aque Destillat. ʒj. *Solve.*

There is great discretion necessary in the application of these stimuli; the ulcers may be over stimulated, or not stimulated sufficiently. When they are of a large size their cicatrization may be promoted by purging the patient, and by applying strips of adhesive plaster over them. An ulcer in the neck, caused by a burn, will heal, but if care be not taken the cicatrix will become contracted, and the chin will, in consequence, be drawn down

to the sternum. This of course causes great inconvenience to the patient. You may imagine that it is very easy to afford relief in these cases, and you will say "cut across the cicatrix." Aye, you may cut across this part, but the cicatrix forms again, and gets more contracted. In such a case as this, Mr. Earle recommends to cut out the cicatrix, and bring the divided parts together, that the contraction may not produce the same inconvenience as before. As far as I can understand of this operation, it ought never to be requisite, as the parts should have been brought together in this way at first. There are some appearances that resemble ulcers, but which really are not so; these arise from burns; the best application to these is the fine dust of the calamina preparata. There are some ulcers that do not go on well, indicating a want of power. Here the granulations are large, grow quick, are of a pale colour, and have little vascularity—have an irregular surface, and when they get to the surface they still continue to grow upward. Here you must restore the strength of the patient, and give him bark; but I need not tell you, that on your local treatment depends every thing. If the granulations arise above the skin, or have a disposition to do so, apply caustic to the part, or the unguent hydrarg. oxyd. nitric. and then adhesive plaster. If the ulcers are very irritable, make slight pressure on them with a bandage. Adhesive plaster, as a means of pressure, is an old yet excellent practice. It should be spread on cloth, and cut into strips of an inch in breadth; apply one strip some distance below the wound; the next half way over the first, the next half way over the second, and so on until you have covered over the ulcer. Take care that the pressure you make with the strips of plaster is every where equal, for in these cases much pressure is not required. When there is much discharge the adhesive plaster should be changed daily; if, on the contrary, there is not much, every other day will be sufficient.

Indolent Ulcers of the Leg.—These ulcers are in general a little below the level of the surface of the skin; they have no granulations, and have a discharge, not of pus, but of flakes of coagulated lymph. The edges of the surrounding skin are thick, prominent, and smooth. If such an ulcer as this comes under your care, let your patient go to bed, apply fomentations and poultices, and when the inflammation has subsided, apply adhesive plaster, and over this a bandage, or if you like it better, you may employ some stimulating ointment.

Sloughing Ulcers.—These are ulcers that spread partly by suppuration and partly by absorption; they are attended with considerable pain and surrounding inflammation, and the discharge from them is very offensive. They cause great disturbance to the constitution. The pulse is frequent, the skin is often

hot and dry, and the tongue furred. In your treatment of these ulcers, you must first ascertain if there is any cause in the constitution acting upon them. If they arise from the use of mercury, the patient should be kept in a state of perfect quietude. When there is a great deal of pain, and a mark of limitation of the sloughing, the pain will often be relieved by the internal use of opium, as Tinct. opii. \mathfrak{M} iv. vel v. You will find that some of these cases will often be relieved by the exhibition of bark. When the ulcer is not very painful and the pulse feeble, you will find this medicine of great service. When there is a great deal of sloughing and the skin is hot, stimulants will only tend to aggravate the symptoms: in these cases you must take blood from the arm, and if you find it buffy, give purgatives and diaphoretics. The local treatment may consist in cold applications, or you may apply the unguent. elemi comp. or the unguent ceræ flavæ, or the solution of chloride of soda; but I particularly recommend you to use the tinct. benzoin comp. To apply this, dip a piece of lint in the tincture, and place it over the ulcer, and prevent it from evaporating by putting dry lint over it. When the sloughing has stopped, you may merely wash the ulcer with the tincture, and then apply adhesive plaster over it. There is no general plan of treatment that can be laid down for you here. According to the external appearances and the constitutional disturbance, so must your remedies be applied. Another mode of cure in these cases is to stop the progress of the sloughing by applying the concentrated nitric acid, but I prefer the mode of cure by the tinct. benzoin comp. In France they apply the actual cautery.

Irritable Ulcers.—These begin in the form of an eruption terminating in an ulcer, which is extremely painful, which frequently bleeds, and has jagged edges. The chief characteristics are extreme pain, and an indisposition to heal, depending upon a cachectic diathesis. Different cases require different methods of treatment. The most general application to these, however, is in the use of small doses of mercury, and decoction of sarsaparilla. Sometimes you will find the digestive organs impaired, and then bitters, such as quassia, will be proper. Remember that these ulcers always depend upon a cachectic appearance. The local application may consist of carrot poultices, with a drachm of hemlock; in some cases Peruvian bark may be of service; stimulating ointments are some times beneficent, sometimes injurious. The difference between sloughing and irritable ulcers is this; the former (sloughing ulcers,) affect the constitution, and cause the disturbance, whilst the latter (irritable ulcers,) are caused by a cachectic state of the constitution.

THE
ANATOMICAL EXERCITATIONS
OF
WILLIAM HARVEY, M.D.

(Continued from page 559.)

THEY commonly affirm that the heart is the fountain and emporium of the vital spirit, by which it gives life to all parts, and nevertheless they deny that the right ventricle makes spirit, but only affords aliment to the lungs; whence they say that the right ventricle is wanting to fishes, and it is entirely wanting to all in which there are no lungs: and that the right ventricle of the heart was made for the sake of the lungs.

1. Why, I ask, when there is the same constitution of both ventricles, the same structure of fibres, tendons, valves, vessels, auricles, and both are found full of the same blood in dissections, equally black and grumous; why, I say, should we suppose that they were appointed for such varied and different uses, when the action, motion, and pulse are the same in both? If the three tricuspid valves at the ingress of the right ventricle are an impediment to the regress of the blood into the vena cava; and if the three semi-lunar valves in the orifice of the pulmonary artery are made that they impede the regress of the blood, why, as they are the same in the left ventricle, should we deny that they were made to prevent the egress and regress of the blood in this situation?

2. And since they are almost entirely alike in magnitude, form, and position in the left as in the right ventricle, why do they say that here they hinder the egress and regress of the spirits, but in the right of the blood? This same organ does not seem to be aptly capable to impede in the same manner the motion of the blood and spirits.

3. And when the meatus and vessels correspond in magnitude, viz. the pulmonary artery and pulmonary vein, why is one destined for a local use as nourishing the lungs, and the other a general use?

4. And how is it probable, as Realdus Columbus observes, that there is need of so much blood for the nourishment of the lungs as this vessel, the pulmonary artery, exceeds in the size of both the branches of distribution of the vena cava, descending into the crural?

5. And, I ask, as the lungs are so near, and the vessel exists so large, and they are agitated by continual motion, why should there be need of the pulse of the right ventricle, and what is the cause that nature, for the sake of nourishing the lungs, should conjoin another ventricle to the heart?

6. As they say that the left ventricle draws matter, namely, air and blood, from the lungs and right sinus of the heart, to make spirits,

and likewise distributes the spirituous blood into the aorta, and hence the fumes are sent back by the pulmonary vein into the lungs, what is it that makes the separation? and how do spirits and fumes go together hither and thither, without either commixture or confusion? If the tricuspid mitral valves impede the egress of fumes to the lungs, how can they impede that of the air? And how can the semi-lunar valves prohibit the regress of the spirits from the aorta, the diastole of the heart following? And how do they say that the spirituous blood is distributed through the pulmonary vein from the left ventricle into the lungs, and that in the mean time the tricuspid valves do not impede? When they affirm that air goes through the same vessel from the lungs into the left ventricle, to the regress of which they wish these tricuspid valves to be an impediment. Good God! how can the tricuspid valves impede the egress of air and not of blood?

Further, they have destined the pulmonary artery, being a large vessel made with the tunic of an artery, for only one and a private use, viz. to nourish the lungs, why do they affirm that the pulmonary vein, scarcely of such magnitude, with the soft and lax tunic of a vein, is formed for many uses, viz. three or four? For they will have the air pass through it (the pulmonary vein) from the lungs into the left ventricle, and they will likewise have the fumes to return through it out of the heart into the lungs, and they will have a part of the spirituous blood to be distributed by it for refreshing them.

If they will have the lungs to transmit, through the same tube, fumes and air from the heart and to the heart, nature is not accustomed to fabricate one vessel and one course for such contrary motions and uses, nor is it ever seen to be so.

If they contend that the fumes and air permeate and return by this way without the bronchia of the lungs, why, on cutting out or incising the pulmonary vein, do we not find in dissection neither fumes nor air? and whence is it, that we always see this vessel full of thick blood, and never of air, though the latter remains in the lungs?

10. If any one will perform the experiment of Galen, and cut the trachea of a living dog, and fill by force the lungs with air, and when distended tie them strongly, then, opening the chest, he will find a great deal of air in the lungs, even to their outer tunic, but not in the pulmonary vein, nor in the left ventricle of the heart. But if the heart could attract air from the lungs in a living dog, or the lungs transmit it, they ought to do it most in this experiment. Verily, in the practice of anatomy, the lungs of a dead body being inflated, who doubts that air would enter here, if there were any passages? But so great do they make this use of the pulmonary vein, viz. for conveying air from the lungs to the heart, that *Fab. ab Aquapendente* con-

tends, the lungs were made on account of this vessel, and that this is the especial particular of the lungs. But I ask, if this vessel is fabricated for carrying air, why is its structure that of a vein?

12. Nature would have more occasion for pipes, and of annular ones, such as the bronchia are, that should be always open and never collapsed, and altogether remain void of blood, lest moisture should impede the passage of the air, as is manifest when the lungs are affected, the mucus being stuffed or admitted into the bronchia, whilst we respire with a wheezing or noise.

The opinion is less tolerable which supposes that a double substance, aerial and sanguineous, is necessary for making the vital spirits, and goes to prove that the blood transudes through the hidden porosities of the mediastinum of the heart from the right into the left ventricle, and that the air is drawn through a great vessel, the pulmonary vein, from the lungs, and from that cause that there are more porosities in the septum of the heart, appropriated to the production of the blood. But, in fact, there are not such porosities, nor can they be demonstrated.

For the substance of the septum of the heart is denser and more compact than in any other part of the body, except the bones and nerves. But if there were foramina, how is it possible (since both ventricles are distended at the same time) that the one can draw any thing from the other, or that the left can draw blood from the right? And why should I not rather believe, that the right draws spirits from the left, than that the left should, through the same foramina, draw blood from the right? But it is truly wonderful and incongruous, that, at the same instant, the blood should be commodiously drawn through hidden and obscure passages, and the air through the most open ones.

And why, I ask, do they fly to hidden, invisible, uncertain, and obscure porosities, for the passage of the blood into the left ventricle, when there is, through the pulmonary vein, such an open passage? It is certainly a wonder to me that they would rather invent, or make a passage through the thick, hard, dense, and most compact septum of the heart, than through the open venous vessel, or even through the fine, lax, and softest spongy substance of the lungs. Besides, if the blood could pass through the substance of the septum, or be imbibed by the ventricles, what need would there be for the ramules of the coronary vein and artery to be divaricated for the nutrition of this septum? It is worth knowing, that, in the *fœtus*, when all parts are fine and soft, nature is forced to bring the blood through the foramen ovale from the vena cava, through the pulmonary artery into the left ventricle: how could it be possible that they could transfuse it so conveniently through the septum of the heart in the adult, now rendered more dense by age?

Andreas Laurentius, in his Book ix. chap. 11, supported by the authority of Galen de Loc. Affect. lib. vi. c. 7, and by the experience of Hollerius, asserts and proves, that the serosities of the cavity of the chest, and the pus of empyema, absorbed by the pulmonary vein, can be expelled through the left ventricle of the heart, and through the arteries, with urine and fæces. In confirmation of this position, he relates the case of a melancholic, who often suffered from syncope, and was relieved from his paroxysms by the emission of turbid, fœtid, and acrid urine. At length destroyed by this disease, the body being dissected, such a fluid as that which he expelled by urine did not appear either in the bladder or kidneys, but in the left ventricle of the heart, and very much in the cavity of the chest; whence he gloried that he predicted such a cause of these diseases.

I am not able, however, but to wonder, that when he divined and predicted that this heterogeneous matter was evacuated in the same passage, that he could not or would not see or assert, that through the same passage the blood could conveniently, according to nature, be brought from the lungs into the left ventricle.

Therefore it is evident from these, and many such statements, that those things which were said by former authors on the motion and use of the heart and arteries, appear to one considering them diligently, either inconvenient, obscure, or impossible. Hence it will be still useful to consider the matter more minutely, and that the motion of the arteries and heart, not only in man, but in all other animals, should be contemplated; but moreover, by frequent dissection of living animals, and by much autopsy, to discern and investigate the truth.

ON THE MOTION OF THE HEART AND BLOOD IN ANIMALS.

CHAPTER I.

Causes by which the Author was moved to write.

WHEN first I applied my mind to observation on the many dissections of animals as they were given to the hand, by which means I might discover the motion, use, and utilities, of the heart in animals, by autopsy, and not by books and other writings; I continually found it an arduous thing and full of difficulties, that with Fracastorius, I almost thought the motion of the heart was known to God alone; for neither could I rightly distinguish how the systole or diastole was affected, nor when or where dilatation and constriction existed, nor could I rightly know, on account of the celerity of the motion, which in some animals exhibited itself to view in the twinkling of an eye, as if by lightning, and immediately withdrew itself, so that I might suppose my-

self to see the systole here, the diastole there; sometimes the motions were contrary, sometimes various, and again confused; whence my mind fluctuated, nor had I any thing I myself could fix on or confide to others; and I did not wonder that Andreas Laurentius had written that the motion of the heart was as the ebbing and flowing of the Euripus to Aris-totle.

At length I used daily great disquisition and diligence, by frequently inspecting various living animals, many observations being collated, I supposed that I had extricated myself from the labyrinth, and discovered the object I desired, the motion and use of the heart and arteries, from which I was not afraid to propound my opinion on this matter, not only privately to my friends, but publicly in my anatomical lectures, which as commonly happens, pleased some and displeased others. Some began to check me, and calumniated me because I had seceded from the precepts and belief of all anatomists. Others called the thing new and worthy of acquisition, confirming that it was extremely useful, but should be more fully explained. At length, partly moved by the entreaties of my friends, that all might be participators in my labours, also partly by the envy of others, who receiving my words with a bad mind, and not understanding them, endeavoured to traduce me publicly, I was compelled to commit this work to the press, that all men might be judges of me and the thing itself. But I was the more willing to do it, because Hieronymus Fab. ab Aquapendente had accurately and learnedly delineated, in a distinct work, almost all parts of animals, and left the heart alone untouched. In fine, if any thing useful or advantageous to the republic of literature should happen from my work, perhaps it might be granted that I had acted rightly, and others might see that I had not laid entirely inert, and as the old man said in the comedy—

No man so well ne'er laid his count to live,
But that things, age, and use, some new
thing give;

That what you thought you knew, you
shall not know,

And what you once thought best, you must
forego.

That which perhaps may now come forth on the motion of the heart, that thence at least others, this way being given, endowed with happier talents, may take occasion of managing the thing more correctly, or of enquiring into it better.

CHAPTER II.

What is the Motion of the Heart from the Dissection of Living Animals?

FIRST then, in the hearts of all living animals, the chest being open, and the capsule which surrounds the heart being dissected, we can observe that the heart is sometimes moved

and sometimes rests, and that there is a time when it moves, and another in which it is destitute of motion.

These things are more manifest in the hearts of cold blooded animals, as toads, serpents, frogs, snails, crustacea, conchæ, lobsters, and all little fishes. All these things are still more evident in the hearts of warm blooded animals, as dogs and swine; if you attentively observe the heart at the approach of death, when it begins to move more languidly, and as if its motion was about to be extinguished, for then you can see openly and clearly that its motions become slower and rarer, and its cessations longer; and you observe and distinguish more conveniently what is its motion and how it effected.

In quiet, as in death, the heart is lax, flaccid, and enervated, and lies as if inclined.

In motion, and at the time in which it is moved, three things are to be particularly observed.

1. That the heart is erected and raises itself up into a point, so that it strikes the chest at the time, and the pulsation can be observed externally.

2. That it contracts every way, but more towards its sides, so that it appears of less magnitude, longer and contracted. The heart of an eel removed from the body, and placed upon a table or the hand, makes this manifest. It equally appears in the hearts of little fishes, and in those colder blooded animals whose hearts are coniform and long.

3. The heart, when comprehended with the hand, becomes harder at the time it is moved, but this hardness is from tension, as if one seized the tendons of his arm with his hand, whilst they move the fingers, he will perceive that these become tense and more resisting.

4. It is to be noted, especially in fishes and colder blooded animals, as serpents, frogs, &c. that at the time the heart is moved it has a whiter colour; when it is quiescent from motion, it is seen to be dyed with a sanguine colour.

From these things it seemed manifest to me, that the motion of the heart was a kind of tension in every part, and according to the traction and constriction of all the fibres on every side, because it is seen in every movement to be erected, invigorated, diminished, and indurated; that its motion was such as that of the muscles, as the contraction is in the direction of the nervous parts and fibres, for the muscles when they are moved, and in action, are invigorated and extended, from being soft become hard, are raised, thickened; so likewise the heart.

From which observation it is accordant with reason, that the heart, at the time it is in motion, is constricted on every side, and is thickened as to its parietes. and contracted as to its ventricles, so as to protrude the contained blood. It is sufficiently evident from the fourth observation, because it becomes

white, first expelling the blood contained in it, and finally, in relaxation and quiescence, the blood re-entering the ventricle, a purple and sanguineous colour returns to the heart. But no one can farther doubt when a wound being inflicted on the ventricle, he will see with every motion and pulsation of the heart, during tension, the blood contained jetting out with force.

These things happen simultaneously—the tension of the heart, the erection of the point or apex, which is perceived externally, from its impulse on the chest, the incrassation of the parietes, and the protrusion of the contained blood with force, by the constriction of the ventricles.

Hence the contrary to the commonly received opinion appears—that at the time the heart strikes the chest, and the pulsation is perceived externally, it is supposed that the heart is distended as to its ventricles, and filled with blood; although you, on the contrary, will understand that the thing is different, viz. that the heart, while it is contracted, is empty. Hence that motion which is commonly esteemed the diastole of the heart, is really the systole. And in like manner the proper motion of the heart is not diastole, but the systole; nor is the heart invigorated in the diastole, but in the systole; for then it is extended, moved, and invigorated.

Neither is it to be allowed, though confirmed by the example of the great Vesalius, of the wreath of ozers, from many twigs being joined pyramidally, that the heart can be moved only according to the straight fibres, and that while the apex approaches the base, the sides are distended in every direction, and the cavities dilated, and the ventricles acquire the form of a gourd and take in the blood; for according to all the power of traction of the fibres which the heart possesses, it is shortened and constricted, and that the parietes and substance are thickened and dilated more than the ventricles. And while the fibres are extended from the apex to the base, and draw the heart to the base, the sides of the heart do not incline to the form of an orb, but rather to the contrary, as every fibre in a circular position is contracted towards a straight line. And as all the fibres of muscles, while they are contracted, are abbreviated in length, so they are distended towards the sides, and in the same manner in which they are thickened in the bellies of the muscles, and that not only in the motion of the heart it happens by direction and incrassation of the parietes the ventricles are contracted, but moreover, by reason that those fibres, or little tendons, in which the fibres, called by Aristotle nerves, are straight (for all those in the parietes are circular,) are various in the ventricles of the hearts of larger animals, whilst they are contracted together in an admirable apparatus. All the interior sides are bound together as with a ligature, for

expelling with greater force the contained blood.

Neither is that which is commonly believed true, that the heart, by any motion or distention of its own, draws the blood into the ventricles, for whilst it moved and stretched, it expects the blood; whilst it is relaxed and collapsed, it receives the blood in the manner which will afterwards appear.

CHAPTER III.

What is the Motion of the Arteries from the dissection of Animals?

Moreover these things come to be observed in the motion of the heart, which have relation to the motion and pulsation of arteries.

1. At the time tension and contraction of the heart, and percussion of the chest occur, and systole, the arteries are dilated, pulsate, and are in their diastole. In like manner, when the right ventricle is contracted and expels the contained blood, the pulmonary artery pulsates, and is dilated together with the rest of the arteries of the body.

2. When the left ventricle ceases to be moved to pulsate and to be contracted, the pulsation of the arteries ceases; and when it is languidly stretched, the pulsation of the arteries is scarcely perceptible, and so likewise the right ventricle ceasing in the pulmonary artery.

3. Likewise any artery being incised or perforated, the blood will be expelled with force from the wound externally in the tension of the left ventricle. In like manner the incision of the pulmonary artery at the same time, and in the tension and contraction of the right ventricle, thence you will see the blood burst forth with impetuosity.

In the same manner also in fishes, the tube which goes from the heart to the bronchia or gills being incised, at which time you will observe the heart to be stretched and contracted, and the blood thence propelled with force. Lastly, you will find, when the blood issues forth in every arteriotomy to a greater or less distance, that the jet is made in the diastole of the arteries, at which time the heart strikes the breast, and this certainly that the time in which the heart appears to be stretched and contracted, its systole is in its tension, and the blood is expelled with the same motion.

From these things it is manifest, contrary to the common dogmata, that the diastole of the arteries is at the time in which the systole of the heart is affected, and that the arteries are filled and distended on account of the immersion and intrusion of the blood by the contraction of the ventricles of the heart. But also that the arteries are distended, because they are filled as bags or a bladder; not filled because distended as a bellows. And from the same cause do the arteries of the whole body pulsate, viz. by the tension of the left

ventricle of the heart, as the pulmonary artery does from that of the right.

Lastly, the pulsation of the arteries is caused by the impulse of the blood by the left ventricle, in the same manner in which, when a boy inflates a glove, he observes all the fingers to be distended at one and the same time, and the pulsation simulated. For, according to the tension of the heart, the pulsations become greater, more vehement, frequent, quick, and preserving the rhythm, quantity, and order of those of the heart.

Nor is it to be expected that on account of the motion of the blood there, a certain time should elapse between the contractions of the heart and the dilation of the arteries, especially those that are remote, that they do not happen together, and in the same manner, as in the inflation of a glove or bladder; because, as in a drum or long pieces of wood, a full stroke and the motion are simultaneously in both extremes, and because Aristotle, lib. iii. Hist. Anim. c. 9, de resp. c. 15, observes, "the blood of all animals palpitates within the veins (he means arteries,) and with a simultaneous pulsation moves in every direction, so all the veins pulsate together, because all depend upon the heart; but it always moves, and wherefore they always and simultaneously with it move."

It is to be observed, along with Galen, that the veins were called arteries by the ancient philosophers.

It happened formerly to me to see and have under my hands a certain case, which most clearly confirmed to me this truth. A certain patient had a large pulsating tumour, called aneurism, on the right side of his throat, near to the descent of the subclavian artery into the axilla, produced by the erosion of the artery itself. It increased rapidly every day, on account of the emission of blood from the artery, pulsation distending it, which was discovered on dissection, after death. The pulse of the affected arm in this man was weak, on account that the greater portion of blood was diverted into the tumour, and the influx into the arm was intercepted.

Wherefore, whether by compression, stuffing, or interception, the motion of the blood through the arteries is impeded; here the remote arteries pulsate less, as the pulsation of the arteries is nothing but the impulse of blood into them.

Failure of Tobacco in Traumatic Tetanus.—Dr. Graves states that he gave tobacco the fairest trial in a case favourable for its use, without a beneficial result.—*Dublin Journal of Med. and Chem. Science, May.*

BATEMAN ON CANCER.

On the difficulty of forming a diagnosis in certain cases, illustrated by cases of Cancer. By H. BATEMAN, Esq. Surgeon to the Islington Dispensary, and Librarian to St. Bartholomew's Hospital.

THERE are few circumstances which occasion more embarrassment to us in the first years of practice, than that of finding diseases presenting such very different characters from those which are assigned to them in the descriptions of medical authors. We meet with many cases, it is true, in which the diagnosis is sufficiently easy, but in others the absence of what we have been taught to consider as an *essential symptom*, throws obscurity over the rest, and too frequently leads us to form an erroneous opinion respecting them. Hence we see the necessity of correcting our first conceptions by our subsequent experience, and are thus led to recognise the advantages consequent on that enlarged sphere of observation with which we are furnished by the various medical appointments of charitable institutions.

To those who are not placed under such favourable circumstances for rectifying the erroneous notions which they had been led to form of disease, or rather I should say, for modifying those opinions which may be generally speaking correct, so as to prevent themselves from being misled by them in their application to the particular case which they may be called upon to treat,—to those persons especially, the perusal of the details of cases in which peculiarities exist is particularly useful, by furnishing them with that species of experience which may be so easily appropriated and applied.

Although, whilst making these remarks, very many instances exemplifying their truth rise in my memory; I shall of these only cite *two* on the present occasion; both of these cases of carcinomatous disease, and cases which it appears to me contrast well

with each other, more especially in respect to that symptom which usually entails so much of suffering on the part of the patient, and of anxiety on that of the medical attendant.

In the month of January last I was requested to see a poor woman, about 40 years of age, who had a tumour in her right breast, which had made its first appearance four years before. She had consulted, in the course of that time, several medical men, without having experienced any relief from their prescriptions. When I saw her the greater part of the mamma was occupied by a hard, irregularly-shaped tumour, which was covered by integuments, having a somewhat peculiar œdematous feel. The nipple was retracted, but the tumour could be easily moved upon the pectoralis muscle, and there was no enlargement in the axilla. The local circumstances were favourable for an operation; but her constitution was so worn down by excessive pain, that I dared not advise it. She scarcely ever slept longer than an hour at a time, and even this by no means frequently, and she invariably awoke unrefreshed. Pains existed almost constantly in some part of the body or other; chiefly affecting the back and lower extremities, and these frequently appeared to shoot from the diseased breast. So dreadfully were these pains increased by the slightest attempts at motion, that she was unable to be got up for the purpose of making her bed, and even when her legs only were shifted from one part of the bed to another, she suffered the most excruciating torment. Added to this, there was frequent sickness, with obstinately confined bowels, and an almost imperceptible pulse. This poor creature lived about a month after the commencement of my attendance, the symptoms continuing with undiminished severity to the last few days, when they were accompanied with great tenderness on pressure on the abdomen, succeeded by torpor and death. No examination of the body could be obtained.

Although I have seen a good many cases of carcimona, I never met with one in which the pains were so universal and so constant as in this. In the case which I am about to mention, the disease passed on to a fatal termination, *without the occurrence of this symptom.*

Richard Ivey, of Hornsey-lane, by profession a surveyor, but reduced in circumstances, perceived, some time in the month of August last year, a slight difficulty of articulation, which was soon afterwards followed by some degree of dysphagia. As this was unaccompanied by pain either in the throat or in any other part of the body, and as his appetite remained good, strength undiminished, and as (with the exception of a slight tendency to costiveness) all the functions of the body were performed with regularity, he did not think it necessary to apply for medical advice.

The difficulty of speaking and swallowing gradually increased during the autumn and early part of the winter, and about five months ago hæmorrhage coming on, he was admitted as a patient at the Islington Dispensary, under the care of my esteemed colleague, Dr. Holland; for this gentleman I saw him the first time. He was 60 years of age, thin, pale, and sallow, but active and cheerful. Blood partly fluid and partly coagulated every now and then filled his mouth, or appeared about to flow into the larynx, when he was obliged to expel it. He had no vomiting, nor any cough, except when as occasionally happened a small quantity trickled down the rima glottidis. The jaws could not be widely separated, and therefore it was difficult to obtain a clear view of the pharynx and back of the tongue. I made, however, as careful an examination as I could without being able to recognise any thing more than a slight relaxation of the uvula. For this I ordered an astringent gargle, and gave aperient medicine, so as to keep up moderate action of the bowels, without being at all able to make up my

mind as to what was the real nature of the disease.

This plan was persevered in for some time by Dr. Holland, when finding no amendment, that gentleman prescribed oxymurias hydrarg. in decoct. sarsæ. During the employment of this medicine the hæmorrhage ceased, and he recovered his ability of swallowing *solids* without any difficulty whatever, although he still continued to experience much inconvenience when taking *liquids*. This relief, however, was only transitory. After a few weeks all the symptoms recurred with increased violence, and his strength and appetite beginning to fail, a mixture, composed of decoct. cinch. sulph. quiniæ, acid. sulph. and pulv. rhei. was directed to be taken twice a day. Under the use of this his constitution again rallied, but without any improvement in the local symptoms; and in the beginning of April, his tongue having suddenly become so much swollen as nearly to fill the mouth, Dr. Holland asked me to accompany him to the house of the patient.

The general emaciation was scarcely at all increased since my former visit. His breath was exceedingly fœtid, and his voice scarcely audible, apparently from inability to move the tongue. This organ was swollen to four or five times its natural thickness, and presented a shining tense appearance. His mouth was constantly open in a slight degree to make room for it, but the lower jaw could not be depressed lower than three-quarters of an inch by any effort which he could make. The sublingual (absorbent) glands, and especially that of the left side, were much enlarged, as were also two glands, *apparently situated externally* to the junction of the upper and middle thirds of the sterno-mastoid muscles. The larger of these also was on the left side, and was of the size of a pigeon's egg. His appetite and pulse were good, and he was able to swallow, without very great difficulty, whatever could be got into his mouth. There was considerable

difficulty of breathing, accompanied every now and then on lying down with a violent sense of suffocation, which frequently obliged him to start up suddenly from sleep in great alarm. He did not suffer at all from any inability to procure sleep, but he was a good deal subject to frightful dreams. Having always been relieved by the free hæmorrhages, we thought it advisable to puncture the tongue on each side of the frænum, which was done so as to occasion the loss of four or five ounces of blood. Cont. mist.

I saw him again in a week, when the tongue was much reduced in size, and the sense of suffocation lessened, but the jaws remained stiff and incapable of being more widely separated. The hæmorrhage was more copious than before. As the largest of the swollen glands presented a fluctuating feel, and as its size occasioned some inconvenience, I punctured it with a double-edged knife, when a quantity of yellow serum, having an extremely offensive smell, spirted out of it, to the distance of several feet.

Things went on in much the same way until the day of his death, 29th of April, when the bleeding was more abundant than ever. He died, according to his wife's account, apparently from suffocation. I saw him the day before in as good spirits as usual, and was not informed of his death until six days after it had taken place, when I proceeded at once to make an

Examination.—The glands, which I have described as situated near the union of the upper and middle thirds of the sterno-mastoidei, and apparently external, although firmly attached to them, were found to be two of the deep-seated absorbents which had enlarged more than the rest, and which had occasioned absorption of part of the muscular substance. Through the orifice thus made they had passed, and deposition of lymph taking place around them, they had become firmly united with the muscles themselves, and at the same time more deeply with the sheath of the carotid, so as to render the exposure

of that vessel difficult. The matter contained in these and the other swollen glands, was similar to that found in scrofulous enlargements, except that its smell was more fetid. On separating the tongue, larynx, pharynx, and part of the trachea and œsophagus, from the rest of the body, the whole of the diseased parts were brought into view. The tongue, rima glottidis, and upper part of the pharynx, were covered with coagulated blood, on removing which an irregular, but generally speaking deep ulcer was found, extending almost entirely across the base of the tongue. This had evidently commenced on the left side, near the os hyoides, where it was the deepest, and had thence extended itself in two directions, *transversely* in the way just described, and *longitudinally* to within an inch of the left half of the apex of the tongue. The ulcer presented the appearance of roundish, but somewhat irregularly shaped tumors, projecting here and there, with deep fissures between them; they were firm to the feel, and were covered with a dark coloured detritus. On making a section of the more diseased half of the organ, it was very evident that a deposit of firm grayish bands preceded the ulcerative stage. These constituted the boundaries of the disease anteriorly, and laterally, extending to within a line or two of the tip of the tongue, and also formed the chief part of the projecting masses. The lesser cornua of the os hyoides were completely destroyed, as well as the ligaments connecting the greater cornua with the body of the bone, and caries of the articular extremities of both body and cornua had taken place to a considerable extent. The mucous membrane, covering the epiglottis and sides of the rima, was much thickened, and here and there speckled with spots, in which ulceration had commenced, which were most abundant on that part of the epiglottis looking towards the tongue. The fibro-cartilage itself was thickened but not ulcerated.

So much time had been spent in

this examination, that we were unable to pursue our investigations farther. This I much regret, having had opportunity before of observing that where malignant disease attacks one part of the frame, it generally happens that some others are affected, either by the *same*, or, perhaps still more frequently, by some *other form* of malignant disease, and it would have afforded me much satisfaction to have been able to pursue this point further in the present case.

Islington May, 30th, 1832.

ON TACT AND TALENT.

THE ancients called themselves "sophists," or wise men; the moderns, less vain but more enlightened, assume the appellation "philosophers," or lovers of wisdom. That Pythagoras, Plato, and Socrates were "wise men," does not admit of a doubt; but that "the wise" should call themselves "wise men," is no proof of wisdom. It cannot, however, have escaped observation that the self-encomiastic exclamation, "we are the wise, and wisdom will die with us," is too apt, virtually, to escape from the lips, and to find its way into the contributions to the periodical press of young men. In nothing is this more apparent than in the high minded but circumscribed limits which they assign to talent. Tact is the word generally substituted for proscribed talent, as if tact itself were not a talent. Is there no talent in conciliating opinion, in obtaining practice, in establishing a connexion, and in accumulating wealth? A failure in one, or all of these, is not a trophy of talent. It is not the ability, or the genius, or the good sense, or the master mind of individuals, that brings with it this discomfiture; it is in too many cases the want of talent, or of that species of it styled tact. Application is another word, sometimes invidiously substituted for talent. "A man of no mind, Sir, a mere plodder, a drudge, Sir, a drudge."—is the

chuckling colloquy of these Tyros. But is not application a talent, yea the best, because the most productive part of talent. Either one or other of these condemned qualifications of humble individuals may certainly co-exist with comparative mental incapacity, and inferior literary and scientific attainments; but the highest order of intellect and unquestionable erudition, may be disjoined from both; and while the combination of the whole can alone constitute "the great man," the more popular but less erudite of the two will create "the successful man." Talent, in the speculative sense of the word, is undoubtedly intellectual superiority, it is power of thought; but in its practical acceptance it is power or action. "Wisdom is good with an inheritance," without an inheritance, wisdom is little better than an empty abstraction.

Indifference to individual opinion is another defect, sometimes discernible in young men of talent. "The opinion of weak people," it is said, "cannot hurt them. They are armed too strong in honesty to be injured by such missiles." But they forget that the happiness of every man, is more or less influenced by opinion. For what is character but opinion; and the best part of every being (because the most profitable to himself) is good character. The "con amore" is the passport to connexion in the medical world. Mankind love kindness. "Suaviter in modo, et fortiter in re," is a maxim of wisdom, because it is founded in nature and good sense. Never let it be forgotten, that the causes of things lie deep below the surface of appearances. There is more instinctive sagacity in the "multitude," than the inexperienced and unreflecting give them credit for. They have no time to speculate on causes. They look to effects. Necessity compels them to make the most of every thing for themselves; and if they see nothing in others, they naturally infer that there is nothing to be seen. If, therefore, men of superior understanding took as much pains to recommend

themselves to individual favour, as less gifted practitioners do, the public would very soon shew their good sense by giving a preference to superior wisdom. Instead then of self gratulation on penniless abstractions, be it remembered that mankind never bestow their admiration for nothing, that no man is necessary, that in these times of competition, talent must be made to appear, for "*non presentibus non existentibus*," that the sciences are embellished by the graces, that a courteous demeanor, a cheerful aspect, and graceful attire, are artificial recommendations to respect; that their contraries are blemishes, that success must be deserved if it cannot be commanded; and that while the want of what it has not pleased Providence to bestow cannot be deemed a fault, the neglect of the gift received is a vice. Originality without vulgarity, skill without profaneness and obscenity, gravity without hypocrisy, and gaiety without levity, are the points on which medical men should endeavour to excel.

MEDICAL JURISPRUDENCE

On the effects of Opium-eating on Health and Longevity.

By PROFESSOR CHRISTISON.

WE condense from our Edinburgh contemporary, some interesting remarks on the effects of large and repeated doses of opium on health and longevity, which form the substance of a paper by the eminent professor whose name appears at the head of this article. The subject is one of deep interest, but as yet very little known to the profession. Dr. Christison's paper was elicited by a trial which lately took place in Edinburgh, under the following circumstances:—

The Life Insurance Company of that city refused to pay the amount of a policy, because the insured, the

Earl of Mar, was in the habit of taking large quantities of opium daily; and this fact was withheld from the company on the insurance being effected. All the usual questions put by insurance companies, with one exception, were answered in the affirmative, and that was put to the medical officer of the company—"Can you give any, and what information, respecting his habits?" The plaintiffs urged that as the insurance company accepted the life without an answer to this question, and therefore departed from the usual practice and precaution of such bodies, and must be considered as having accepted the life at a venture.

It was proved that Earl Mar purchased from two to three ounces of laudanum daily, and on one occasion that a servant administered a table spoonful to him for a dose. It was also proved by his domestics, that his general health was bad about the time in which the insurance was effected, but this was contradicted by the evidence on the other side.

Drs. Abercrombie, Duncan, Alison, Maclagan, and Christison agreed that opium-eating must tend to injure the health, and shorten life, but they all admitted that they had scarcely any direct experience in the matter. Mr. Macfarlan, a surgeon apothecary, stated that he knew a female who took two ounces of laudanum daily for many years, and died at the age of sixty—of what disease he could not remember. The judge laid great stress upon the omission of the company in not requiring an answer to the question given above, which he said was material in effecting the insurance, and fixing the premium; and left it to the jury to decide, whether they considered that a person insuring his life was bound in honour and honesty to disclose a secret habit, if the company acts in such a manner as to make it appear that they do not look upon it as material. The medical witnesses for the defence believed that the habitual use of opium was injurious to life; but one of them,

who alone could state a special fact on the subject, had mentioned instances of opium-eaters who had lived to a good old age. It appeared that Lord Mar *alone* knew the extent to which the opium was taken; and as to its effects on his health, it was proved by several witnesses that he was not impaired in body or mind at the time he effected the insurance. Since he had no habit, then, of such an extent as to have any apparent effect upon body or mind, could its effects be so material as to require being disclosed? Upon the whole, the question for the jury was, whether the state of health into which he fell subsequently, was occasioned in any considerable degree by the use of the drug, or by the condition of his affairs, or by both together.

The jury found for the plaintiff, and rendered the company liable.

Dr. Christison states, in commenting on this decision, that all the medical men in Edinburgh, who have paid much attention to the principles and affairs of insurance companies, agree with him, that the verdict was not founded in reason, or supported by evidence. This is a very strong, and we must take leave to add, a very unwarrantable conclusion. The jury could not, according to the evidence, arrive at any other conclusion. The evidence of all the medical men except one, was presumptive, and proved nothing in the consideration of the jury; but admitting, as no one can deny, that the habitual use of opium is injurious to health and longevity, we must remember that it was proved by several witnesses, that the health of the Earl was good at the time of effecting the insurance, and that soon afterwards he was reduced from affluence to indigence, that he died in his 57th year from dropsy and liver complaint, and that Mr. Macfarlane informed the jury of a case in which an opium eater lived to the age of 60. Dr. C. is however of opinion, that as the medical referee answered all the special questions arising out of the general one omitted, the company

were not guilty of negligence to such an extent as to render them liable, if the life accepted under such information should turn out to have been at the time, as was in his opinion proved in this case so clearly hazardous, that no insurance company, with a correct knowledge of the facts, would have accepted it. We confess we cannot comprehend how "the life could have turned out at the time to be hazardous," after the medical referee, the officer of the company, considered it good, as was attested by several witnesses at the trial. But the domestics proved for the defence, that the Earl's health was infirm at the time he effected the insurance, and it is said that they were more likely to know it than his out door acquaintances. We cannot assent to this position, because if the health was so infirm, it must have been obvious to out door as well as in door observers, and more especially to the medical officer of the company, who doubtlessly examined it with that caution always exerted on similar occasions.

Dr. Christison remarks that on one occasion the insured took a table spoonful of laudanum, which is six times the largest and twelve times the ordinary dose for unaccustomed persons, which could not be taken with safety without the long and frequent practice of using it in gradually increasing doses: besides, it was proved he bought two or three ounces daily—granted, but was it proved that he took this quantity? It certainly was not, nor was the size of the spoon described, so that the quantity might be less than that supposed, and even the jury were informed that the female referred to by Mr. Macfarlane had taken two ounces daily for many years, and lived longer than the individual whose case was under consideration; nor did the evidence of the physicians throw any light on the minds of the judge and jury. Dr. C. then proceeds to shew the effects of opium on those addicted to it, and observes—

"That in this country at least the usual effect of the opium-eater's dose

is neither to throw him into a state like the excitement of intoxication from wine and spirits, nor to induce for some time heaviness and stupor,—but simply to remove dullness and depression,—to make him alert in his occupations and conversable in his intercourse with others,—to occasion, in short, a state of mind and body which no one would suppose, at all events no one not aware of the habit would suppose, indicated anything unusual in his condition at the time. Now was it not sufficiently proved, or at all events extremely probable, that Lord Mar, who saw few friends and these but seldom, and almost entirely in the forenoon, who went out little even to his neighbouring grounds, and that too only in the forenoon, would take care, provided he had contracted the habit of using opium in excess, to resort on these occasions to the customary means of tranquillizing himself, and making him fit for the intercourse of society?

“The third question to be considered is the general one, whether the habit of opium-eating is detrimental to health and longevity? On this point it was stated above that several physicians in Edinburgh were examined on the trial, who all considered the habit very injurious; but that few special facts were known to the witnesses; and that these few rather countenanced the supposition that a fair proportion of opium eaters reach an advanced age. In the present place I shall consider the question independently of the trial, because some facts have come under my notice since it took place, which it will be convenient to embody here in one view with the rest.

“It does not necessarily follow that the habitual use of narcotics must tend to shorten life. The practice of snuffing, smoking, or chewing tobacco, is not believed to have any such effect. It is true that the much more injurious and more permanent effects which every repetition of a dose of opium produces on the digestive organs and on the nervous system, supply a

stronger presumption of ultimate injury to life in the case of that drug, than exists in the instance of tobacco. But even these circumstances must not be too easily assumed as sufficient grounds for the belief that the practice of using opium in excess tends to shorten life. For it is well-known that some disturbed states of the nervous system, such as hysteria, may exist for a long time, and that the functions of digestion may often be long and seriously disturbed by ordinary stomach complaints, without life being materially shortened. It is necessary then to appeal to special facts.

“I have not been able to find any facts of the least value on the subject in medical records. The following cases, however, have been communicated to me by several of my friends, in whose information I can place reliance.—1. A young lady, of five-and-twenty, has taken it largely for fifteen years. It was first administered secretly by her nurse to keep her quiet and save trouble; and the unhappy lady was subsequently compelled to keep up the practice for her comfort. She enjoys good health.—2. A female, a patient of mine in the Infirmary, a martyr to rheumatism, took it for ten years previous to her fortieth year in the quantity of a drachm daily of solid opium. She then gave it up. Six months afterwards she was attacked with jaundice; subsequently she was several times severely ill of rheumatism; and she died in her forty-third year of consumption. This woman, however, led a licentious life from an early period.—3. A well-known literary gentleman who has taken laudanum with some intermissions for twenty years, and occasionally to the extent of nine or ten ounces daily, has now attained his forty-fifth year. He is spare in form, looks older than he is, but is capable of undergoing a good deal of bodily fatigue, and enjoys tolerably good health so long as he takes sufficient exercise. His allowance when I had last an opportunity of conversing with

him was about nine drachms of laudanum daily.—4. A lady in this city, after drinking laudanum to excess for upwards of twenty years, died about the age of fifty. No information could be supplied of the disease of which she died.—5. A lady of the same age takes about three ounces daily, and has used it for many years. She appears to enjoy good health.—6. A lady, about sixty years of age, has taken it above twenty years, and is in good health.—7. A charwoman, who had been in the daily practice of drinking two ounces of laudanum for many years, died at the age of sixty. The gentleman who has stated this fact, does not remember what disease she died of, although he dissected the dead body.—8. An eminent literary gentleman, I am informed, has been in the habit of taking laudanum since he was fifteen; and his daily allowance has sometimes been a quart bottle (twenty-six ounces) consisting of three parts of laudanum and one of alcohol. Enormous as this dose may appear, I am assured the fact is well-known to his acquaintances. He is about sixty years of age, and enjoys good health.—9. A lady of 70, now alive, has taken about half an ounce of laudanum daily for nearly forty years. She enjoys tolerable health, and every year travels great distances to visit her friends.—10. An old woman of eighty died a few years ago at Leith, after taking about half an ounce of laudanum daily for nearly forty years; and she enjoyed tolerable health all the time.

“These cases undoubtedly show that a certain number of opium eaters may attain a good old age. But this circumstance will no more justify the conclusion that a fair proportion of them do so, than the parallel fact that drunkards often attain old age would bear out the conclusion that drunkenness is on the whole not inimical to longevity. The probability is, that many persons die at an early age of the effects of opium-eating, whose habits are never heard of, simply from the circumstance that they die young,

before their secret is detected. The cases now succinctly related, then, are given rather with the hope of inciting others who have better opportunities to make farther inquiries, than of conveying practically useful information, And I fully anticipate the result, that this habit will be eventually found not less destructive than the vice of drinking spirits. I cannot bring myself to think, that the habitual use of a drug which produces such permanent narcotic effects as opium, disorders subsequently the digestive functions in so great a degree, leaves those who use it habitually in so miserable a state during the intervals of using it, as appears from their own confession, and leads obviously to emaciation and a worn-out elderly appearance at an early period of life, can be consistent in general with the enjoyment of health, and the chance of an average prolongation of the term of human life.”

Dr. Christison is of opinion that the state of the opium eater while under the influence of his dose, “is often not at all different from that of an ordinary person of active habits, cheerful disposition, and liveliness of ideas, and that in many instances no one could have any suspicion of the fact. Such persons require little laxative medicine.”

We have given the above long extract on account of its great value, and with the hope that others may investigate the effects of opium on health and longevity. We cannot help reminding our readers of the case of Dillon, who was convicted last year in Dublin of female violation. The prosecutrix swore that he had exhibited to her some narcotic in wine, after having taken a fish dinner, by which she became almost immediately insensible, and that when her faculties returned, she found herself in bed with the prisoner, and made every effort to oppose his wishes. The prisoner was found guilty, and sentence of death passed upon him; but his execution was deferred to a future day. In the mean time several of the phy-

sicians of Dublin examined rigidly the evidence of the prosecutrix, and concluded from her statement that no narcotic could produce the effects she described. A memorial to that effect was submitted to the Marquis of Anglesey, and was also submitted to the best jurists in London and Edinburgh, all of whom were of the same opinion.

A few days before the time fixed for his execution, Dillon appeared truly penitent, admitted the justice of his sentence, but protested in the most solemn manner that he had not administered any drug. When he made this declaration he had no hope whatever of life; and we state the fact upon the authority of the clergyman who attended him. Fortunately for him the united memorial of the physicians of Dublin, London, and Edinburgh, carried conviction to the minds of his Majesty's Government, and led to a commutation of the sentence to transportation for life. We append this statement as bearing upon the valuable paper whose substance we have placed before our readers.

BOTANY.

[OUR Botanical Corner will, we assure our younger readers, be well worth their attention during the present season.—EDS.]

Uses of Botany.

In a lecture lately delivered before the Medico-Botanical Society, the Professor of Botany related the following extraordinary anecdote, shewing the value of botanical knowledge:—

One stormy night, about ten years ago, a ship was driven on shore near Beechy Head, when the passengers and crew were washed overboard, with the exception of four, who were cast upon some low rocks. The excessive darkness of the night did not allow these persons to see beyond a very short distance; but to their

great alarm, they soon found that the waves were rising higher and higher, and they concluded that the sea would, before long, overwhelm them where they stood. Whilst in a state of dreadful suspense as to whether they should wait where they were, or plunge into the water to take the chance of finding the shore, one of them grasped a reed to prevent himself from falling on the slippery rock. The frequent flashes of lightning immediately enabled him to see that it was a root of *samphire* which he held in his hand. A cry of joy was instantly uttered by the man, the cause of which he quickly communicated to his despairing companions. He knew the botanical property of samphire to be, that it *never grows within reach of the water*. The conclusion was obvious. The party remained on the rock until morning, when they were descended from a distant cliff, and were ultimately carried in safety to the land.

Systems of Botany.

The British student has two systems of botany to learn—the *Linnaean* and the *natural* (commonly called that of *Jussieu*.) The truth is, that the superiority of the natural system over the other was so obvious, that it was adopted exclusively in some countries, and partially in others. In England it seems that we use both, the old one from prejudice, perhaps, and the junior one from necessity. As we cannot proceed a step in studying botany without being acquainted with the principles of each arrangement, it becomes indispensable to describe them. We shall begin therefore with

The Linnaean System.

Linnaeus arranged the whole vegetable kingdom into twenty-four *classes*; each class consisting of several *orders*; each *order* of several *genera*, which are again subdivided into *species*. The principle upon which this classification is established is—1, the number; 2, the situation; 3, the

proportion of the *stamens*. A *stamen* consists of a small bag (the *anther*,) supported by a *filament* (stalk,) which generally grows out of the *calyx* (flower cup,) the *corolla* (blossom,) or the receptacle. The number varies from one to 100. The names, with their meaning, of the twenty-four *classes*, are as follows :—

- 1, Monandria—one stamen.
- 2, Diandria—two stamens.
- 3, Triandria—three stamens.
- 4, Tetrandria—four stamens.
- 5, Aentandria—five stamens.
- 6, Hexandria—six stamens.
- 7, Heptandria—seven stamens.
- 8, Octandria—eight stamens.
- 9, Enneandria—nine stamens.
- 10, Decandria—ten stamens.
- 11, Dodecandria—twelve to twenty stamens.
- 12, Icosandria—twenty or more stamens, inserted into the calyx.
- 13, Polyandria—many stamens, inserted into the receptacle.
- 14, Didynamia—four stamens; two long and two short.
- 15, Tetradynamia—six stamens; four long and two short.
- 16, Monadelphia—filaments united at bottom, but separate at top.
- 17, Diadelphia—filaments in two sets.
- 18, Polyadelphia—filaments in more than two sets.
- 19, Syngenesia—stamens united by anthers.
- 20, Gynandria—stamens proceeding from the pistils.
- 21, Monœcia—stamens and pistils in separate flowers, upon the same plant.
- 22, Diccia—stamens and pistils in separate flowers, upon different plants.
- 23, Polygamia—perfect and imperfect flowers on the same plant.
- 24, Cryptogamia—flowers not visible to the naked eye.

We have said that each of the *classes* was divided into several *orders*. It is only necessary that we should give the names, with their meanings, of the *orders* of the first thirteen *classes* :—

Monogynia—one pistil.
 Digynia—two pistils.
 Trygynia—three pistils.
 Tetragynia—four pistils.
 Pentagynia—five pistils.
 Hexagynia—six pistils.
 Heptagynia—seven pistils.
 Octagynia—eight pistils.
 Enneagynia—nine pistils.
 Decagynia—ten pistils.
 Dodecagynia—twelve pistils.
 Polygynia—many pistils.

A *pistil* is found almost always in the centre of the flower, and consists of three parts—the *germen*, which is the lowest part, containing the elements of the fruit; the *style*, which is a column prolonged upwards from the *germen*; and the *stigma*, which is placed on the top of this column, like a crown.

The *genera* are subdivisions of each of the *orders*, and they depend on the existence, in certain plants, of a *common* principle in the condition of their flowers and fruits, which is peculiar to them.

The *species* are further divisions of each of the *genera*, and result from differences in the roots, stems, leaves, &c.

Such are the principal divisions of the Linnæan system; those of the natural system we shall next explain.

STRICTURES ON THE DOCUMENT OF THE CENTRAL BOARD OF HEALTH.

To the Editors of the London Medical and
Surgical Journal.

GENTLEMEN,

THE last dying speech and confession of the Central Board of Health, contained in your last Number, which *malgré lui* has been wrung from the lips of poor Sir William Pym, is, to say the least of it, a very amusing and harmless production; and affords another painful instance (if another were wanting) of the miserable senility and dotardism which have all along characterized the proceedings

of that sapient body. Having lost their characters as scientific members of a Board of Health, in a desperate fit of cowardly enthusiasm they have formed themselves into a "Medicine-made-easy Company," in opposition, I suppose, to the "Sanative Wine Quackery Company," in Fleet-street. I pass over their list of drugs,—their 12 dozen pills for 500 people, and their clear directions for making mustard poultices, and come to what they term "precautions," which remember, gentle reader, are only to be followed by those who are in *easy circumstances*, and not by the *poor*, who have been and who are the most frequently attacked by the disease. What a shameful and disgraceful specimen of paltry and shuffling ignorance is this. These "precautions" will sorely puzzle some of the knowing ones who may read them. We have truisms, *ex. gr.* moderate exercise in the open air in fine weather is conducive to health, which is followed up by the hope, that the weakly and the aged will not fatigue themselves by walking too much. The "true believer," in the treatment laid down by these board-headed gentlemen is then requested to observe, whether the purging be of the ordinary bilious or feculent kind, as a first step to learn which, I can well believe, that he would send to the nearest bookseller for Johnson's Dictionary, to learn the precise meaning of the latter of these medical adjectives. He is then (only, however, if he be in easy circumstances and can afford it) ordered to have his belly fomented with flannels soaked (whether he be a member of the Temperance Society or not) in hot spiced wine, or in hot spirit and water. If there be sickness or vomiting, the patient is to have a *half pint emetic*!! Chicken broth appears to be held in high estimation by these venerables, for we have chicken-broth diet in one place, and chicken-broth vomitings and purgings in another, and this is followed up by another half pint salt and water emetic, and mustard into the bargain. Mustard again, quoth

these worthies, aye and enough too to cover the *whole* stomach (if you leave out an inch of the cardiac orifice it is all over with your patient), belly and front of the short ribs; here is a mathematical square for you. In the precautions against diet, all cold is ordered to be strictly avoided, and as a set off to this, in the treatment of the first stage of the attack, three table spoonsfull of cold, or iced, water are recommended to be taken. Did these worthies ever hear of gastritis? I must presume not, or if they have, their ignorance is greater than I have hitherto imagined it to be. A few lines further on, three pints of water, as warm as the hand can bear it, are ordered to be thrown up the rectum. This is certainly blowing hot and cold with a vengeance, or perhaps these sapient gentry are not aware of the great relative difference of temperature that can be borne by internal and external surfaces.

But I surely need not dwell any further upon the evident faults and follies of this precious document. I am sure I have said enough to convince your readers, that like the dying flame of a lamp, that burns higher ere it decays, so this vain but impotent attempt to puff themselves into bolstered notoriety, will only serve to increase the degradation of their downfall, and to augment the joy which every honest man will feel when these men have retired from public life to the silent privacy of their own homes. In their own narrow spheres of life the world will not heed them for a moment. Can they say that they have saved a single—only a single life? No!! Did the medical profession place the least reliance on their judgment? No!!! Was not the whole English medical press (with but two insignificant exceptions) against them? Yes!!!! What good or practical benefit has resulted from the precautions laid down by them?—None!!!!!! What new theoretical or practical views of the disease has the *Cholera Gazette* (published with their sanction) given to the professional

world? None!!!!!! Then if all these questions be answered truly, which I will vouch my existence they are, what, in the name of Heaven, have these Members of the Board of Health done? Nothing—absolutely nothing!!!!!! But they are now dead, and peace be to their remains.

Ashes to ashes and dust to dust,
If God won't have them, the cholera must.

DELTA.

The Midland Medical and Surgical Reporter, for May, 1832.

THIS highly useful contemporary continues to supply a medium of communicating to the metropolitan medical practitioners, the experience of their provincial brethren. We regret to notice that this is the last number of this excellent journal, and which in future will be published in the shape of Transactions. Among the list of contributors, or *collaborateurs*, we find the names of many men justly celebrated and eminent in the profession. To prove this we have merely to mention the names of Drs. Conolly, Hastings, G. E. Male, J. K. Walker, E. M. Barlow, Darwall, &c.; Messrs. Middlemore, Dendy, &c. &c. The number before us contains eleven essays, the first of which is "*On Pericæcal Affections*," by J. K. Walker, M.D. He states, that he has chosen that term to designate a class of diseases seated primarily in the cœcum; but, in their ulterior stage, extending not unfrequently to the colon, and sometimes to the bladder, vagina, rectum, or other contiguous viscera. The disease to which the doctor appears more particularly desirous of drawing attention is inflammation of the cœcum, either acute, sub-acute, or chronic. It is characterised by pain in the situation of that intestine, frequently extending over the whole abdomen, which is exquisitely tender, and the gut is frequently evidently tumefied. The inflammation has proceeded occasionally to suppuration. The narrator says—

"most of these patients were relieved by uniting depletion with the exhibition of mercurials, so as to affect the mouth." As we are of opinion that cases illustrate doctrines better than any thing that can be said, we shall extract two or three cases from Dr. Walker's essay, which will serve at once to describe the disease and treatment:—

"David Shaw, ætat. 21, a weaver, on the 7th Sept. last, was attacked with pain in the right iliac region, and great tenderness on pressure on that part. Pulse quick; bowels confined. The first general bleeding not affording relief, a second was had recourse to; at the same time leeches were applied to the part. In this case the bowels resisted the action of powerful cathartics, and it was not until a large glyster had been thrown up, that they yielded to the action of aperients, the use of which was persevered in for eight or ten days, and a blister applied to the part. At this period, some irritation of the mucous membrane of the intestines gave rise to pain, and frequent stools of a dysenteric appearance, which were relieved by the hydrarg. cum cretâ, and small doses of ipecacuanha. The mouth was affected by the mercury, and the progress to convalescence was afterwards uninterrupted. *All traces of the tumour disappeared.*"

Without being at all censorious or hypercritical, we are well entitled to declare the case we have just recorded as unsatisfactory and inconclusive, more especially, as the doctor tells us, all traces of the tumour had disappeared, previous to which notice we had not heard a word of it. The next two cases will better exemplify the author's opinions:—

"Mary Peel, ætat. 20, with an infant at breast, was attacked with violent pain in the abdomen, but especially in the right iliac fossa, where a distinct tumour was felt, to which leeches and blisters were successively applied, and the calomel given so as to affect the mouth. After this the tumour gradually disappeared, and

by a perseverance in the use of aperients, the symptoms were all removed."

"David Hirst, ætat. 37, shoemaker, was cured of an abscess in the right knee, in the month of August last. On the 18th of October, when I first saw him, he complained of pain in the right iliac region, and tenderness on pressure, or on moving the right leg. General and local bleeding was followed by a repetition of aperients, and the mercury pushed to the extent of affecting the mouth. Under this treatment, he was decidedly relieved. Soon after, however, in consequence of some irregularity in his diet, the symptoms returned, and a tumour was felt, at first small, but increasing gradually to a considerable size. It has since gone on to suppuration, and is, at this time, beginning to discharge outwardly." It appears, however, that it did not communicate with the intestine, as no fecal matter was discharged with the pus. Dr. Walker recommends abstinence from drastic purgatives in long-continued costiveness, especially where there are scybala, and advises rather the use of glysters.

We are next reminded of the numerous diseases of the abdominal viscera which will produce functional derangement of the heart, and this is often ascribed to organic lesion. Several cases are briefly referred to in illustration of this point. There is no doubt but fecal accumulations about the cœcum are of occasional occurrence, and are often undiscovered. During the last year, we, with six other physicians and surgeons, were consulted in the case of an illustrious statesman, in whom there were pericæcal accumulations. These were ultimately removed by laxatives and copious oleaginous enemata, which brought away an immense quantity of black coloured scybala, with two intestinal concretions, the nucleus of one having been a silvered mercurial pill, and that of the other a tea leaf. The general

health, which was previously bad, now rapidly improved by tonic medicines, and our noble patient is now looking better than he has done for some years. Upon the whole, Dr. Walker's essay is highly instructive, and will amply repay the reader who peruses it.

The second paper is by Dr. Barlow, of Bath, "On Dropsy with Coagulable Urine." After acknowledging the claims of Drs. Blackall, Bright, Christison, and Gregory, we are informed that but little precise reference is made to the character of the coagulum formed, or to the quantity of albumen thus discharged. Dr. B. has seen the whole urine coagulate into a solid mass, from which, after twenty-four hours, no fluid had separated. He observes—"a marked distinction, too, is observable in the coagulum of urine under different conditions of disease. In broken constitutions, where dropsy was connected with disease of the heart, or other visceral disorganizations, I have generally found the urine high coloured, and the albumen coagulated into a dark, firm, irregular globe; on the contrary, in dropsies attended with active inflammation, the albumen has been much more copious, diffused at first through the whole fluid, rendering it turbid and thick, and subsiding, by rest, in a whitish or pale yellow pulp, accommodating itself to the form of the containing vessel. Previously to the application of heat this urine presents nothing to distinguish it from that which is healthy; nor would the albuminous combination be, on a cursory view, at all suspected. In order to ascertain the quantity of albumen discharged, it is necessary to multiply the tested portion by the number of pints of urine thus passed, and in this way it sometimes proves to be enormous. So considerable a discharge of a nutrient element cannot but be of the very first importance in all speculations respecting the nature and treatment of disease. Dr. B. relates a case of inflammatory dropsy, in

which the proportion of the albumen to the urine varied from $4\frac{1}{2}$ oz. to 8 oz. in seven days. He thinks that the discharge of the albuminous urine is a corrective effort of the constitution for removing redundancy, and restoring a healthy balance to the constituents of the circulating fluids. During the copious secretion of albumen, the disease progressively declined, recovery advanced as the secretion diminished, and when this ceased to appear, very little disease remained. Dr. Barlow's opinion is, that albuminous urine does not always depend on organic disease of the kidney, as maintained by Drs. Bright, Christison, and Gregory. He relates an interesting case, in the subject of which the kidneys were found healthy on dissection:

Dr. Darwall also has arrived at the same conclusion as Dr. Barlow, as appears by the tenth paper in the *Journal* under notice. He says that Dr. Wells read a paper in 1806, before the Medical and Chirurgical Society, on the Coagulation of the Urine in Anasarca, consequent to Scarlatina, while Dr. Blackall published his work on Dropsy in 1813. "A little more consideration, I perhaps might add," says Dr. Darwall; "a little less ignorance would have prevented the London Journalists from at once adopting these views, for many cases were on record when Dr. Bright's book was published, which ought to have induced less exclusiveness in the deductions which that talented physician has drawn." We cannot help observing that Dr. Darwall is rather a little presumptuous, when he comments upon the ignorance of the London Journalists, the majority of whom have given fully as much proof, if not a good deal more than he has, of scientific and practical information. However he may estimate his own knowledge, he must shew much more proof of research than he has yet done, to compete with some of the London Journalists. In saying this we speak of Dr. Darwall in his capacity of censor-general of the medical press of

London, and not as an individual. As a practical physician, we believe him as competent as those of his age and standing, but by no means destined for the office of censor of the London medical press.

The paper before us states that, in many cases of coagulable urine, there is no organic disease of the kidney, but pneumonic inflammation, which being removed, the deposition of albumen in the urine will cease. He also cites a case in which there was no disease of the kidney.

THE

London Medical & Surgical Journal.

June 9th, 1832.

ATTEMPT AT INFANTICIDE.

A CURIOUS case of this description became the subject of investigation at the Bow-street Police Office, a few days ago. A new-born infant was discovered in a water closet, at a baker's, near Covent Garden. It had fallen thirteen feet deep, and its body had sunk into the contents of the cess-pool to the axillæ. It was removed with great care from this perilous situation, and is now doing well. On examination, it was discovered by a medical man, Mr. Snitch, of Catherine-street, that a servant in the house in which this transaction occurred, had been recently delivered; and when informed that an infant was heard crying in the privy, she replied it was a cat. This last declaration shews malice prepense, but the law does not provide for this case, as the child is alive. We have reason to know that this case can be considered

in no other light than an aggravated assault, or concealment of pregnancy.

The escape of the infant from such imminent danger, and from death by hæmorrhage, as the umbilical cord had not been tied, is an important fact in legal medicine. It is true that in those cases in which the infant falls upon the floor or ground immediately after birth, death seldom occurs either by concussion of the brain, or by hæmorrhage; but in this instance it fell a depth of thirteen feet, and into an atmosphere unfit for the maintenance of life. It has not been determined how long it remained exposed to this danger. It was likewise a most extraordinary circumstance that the entire body had not been buried in the contents of the privy, which occupied several feet in depth.

SUPPOSED CASE OF BURKING

Of a dead body, supplied by the usual source to the Medical School at the Westminster Dispensary.

ON Friday the 1st instant, the attention of one of the Lecturers of the Medical School at the above Institution was directed to the appearances presented by a body which had been supplied in the usual way. It was that of a young man of about seventeen years of age, of middle stature, fully developed, and exceedingly muscular. The face was tumefied, and of a purple colour, the tongue black, and protruding about half an inch beyond the lips; the left eyelids open; eye protruded, as in cases after hanging, and suffused with blood; the right

eye completely closed; the cuticle was removed on the left side of the forehead to an extent about the size of a shilling, the subjacent skin being red; the veins of the neck exceedingly congested, the neck sublaxed, and the indentation of a cord apparent, under the angle of the right jaw; a frothy sanguinolent dark-coloured fluid escaped from the mouth and nostrils; the surface of the chest appeared to have been blistered; the integuments of the abdomen were of a greenish colour; the abdomen tumid; the superior and inferior extremities remarkably flexible: on the right fore-arm were the letters W. K., an anchor, and a heart; on the left the letters E. S., being very indistinctly marked. In the left arm was an incision similar to that made in the operation of venesection, but with no signs of inflammation, or adhesion of its edges. The fingers were flexed, the nails blue, the skin shrivelled, and both hands and feet appeared as if immersed in water. There were no other appearances on the surface of the body; but those observed were considered sufficiently suspicious to warrant the belief that the youth had come by his death unfairly, and were communicated to the Lecturer on Anatomy in the school, who had previously entertained doubts of a similar nature, and on the next day went down to Woolwich, whence the body had been obtained. On inquiry he found that a youth, answering the description already given, had died there on the 18th of May, and certain marks, identifying the subject, as the initials

on the right arm, five blue dots between the right thumb and index finger, and a small wart, which was compared to a tear under the right eye, were said to exist on the person alluded to by Captain Ridgell, of the Ganymede hulk, and Dr. Bossey of the Floating Hospital Ship, all which were observed on the dead body. It was said that the youth had died of some chronic disease. While this inquiry was being made, intimation was sent to Mr. Thomas, superintendent of Police, through an anonymous source, that a body was then in the dissecting rooms of the above medical school, under suspicious circumstances, which caused his attendance at seven o'clock, on Saturday evening, when the above statement was made; in consequence of which an inquest was held on Monday the 4th instant, an account of which we subjoin, as supplied by our reporter:—

INQUEST—SUSPECTED BURKING.

An inquest was held on Monday, the 4th instant, before Thomas Higgs, Esq., in the Physicians' room, at the Westminster General Dispensary, Gerrard-street, on the body of a boy, supposed to have been murdered.

Mr. Thomas, superintendent of police, on oath, deposed that he had received an anonymous letter on Saturday, the 2nd instant, stating that the body of a boy, presenting very suspicious appearances, had been brought to Mr. Dermott's theatre, and that if he were not speedy in his movements, he would be too late to prevent its dissection; the letter was signed "a Medical Student." Mr. T. attended at the theatre, and found that Mr. Dermott, whose suspicions had been excited, had gone to Woolwich to institute inquiries. He learnt from him that two men had brought

the body from Plumstead, near Woolwich, and that the boy had died of disease, on board the hulks. Mr. Dermott had had an interview with Dr. Bossey, of the Hospital, and Capt. Ridgell, of the Ganymede hulk, and from them he ascertained that a boy, answering the description of the body in question, had died on board the hospital-ship, and was buried near Plumstead. Mr. Thomas had himself gone to Woolwich, and made various inquiries, which confirmed the previous statement. Certificates (not *affidavits*) were produced from Dr. Bossey and Capt. Ridgell, stating that the boy died of the effects (or sequelæ) of cholera, on board the hospital-ship, and was buried on the 18th.

Mr. Andrew Nairn, quartermaster of the Ganymede, identified the body by five dots in the junction of the right fore finger and thumb, the initials on the arm, a wart under the eye, &c. He was convicted at the Old Bailey, in 1827; he complained of being ailing four or five days before he was removed to the hospital-ship, where he died.

Mr. Dermott here made some remarks on the absurdity of contagion, and offered to allow himself to be shut up with the body for any time, and would willingly dissect it, to remove that fear from the public. He was not aware that the boy had died of cholera when he received the body.

The foreman of the jury alluded to the state of the body, and the marks of a cord around the neck.

Mr. Dermott attributed the decomposition to the body having lain in water, it being buried in a marsh near the church yard. The marks of the cord he attributed to a rope being put about the neck to draw it out of the grave, which would account for the protrusion of the tongue, and the subluxation of the vertebræ.

Mr. Thomas observed that the neck might have been broken in forcing out the teeth, the back of the neck being placed on the edge of the grave.

Mr. Dermott reiterated his offer in

regard to the body, and strenuously opposed the doctrine of contagion; he was of opinion that the cholera had been got up to impede the Reform Bill.

Mr. Thomas observed that the medical men at Woolwich considered that great danger, in regard to contagion, would result from the exposure of the body, especially after it had been so long buried.

A verdict of *natural death* was returned, and it was decided that the body should be given up to the parish authorities. The foreman of the jury put it to them, whether they approved of the body being given up for the benefit of the Institution, but the coroner told him the jury had no power to interfere.

The medical or civil evidence given at this inquest does not satisfactorily account for the morbid appearances observed on the head and neck, or indeed upon other parts of the body.

The countenance of a person destroyed by malignant cholera is collapsed and contracted, giving the appearance of an advance of ten or twenty years in age, whereas in this instance the face was tumefied.

There was also venous congestion of the neck only, while in cholera such a state is most evident in the limbs, and muscularity is not characteristic of cholera or of chronic disease. We cannot assent to the opinion, that placing a rope round the neck of a body, after being inhumed for fifteen days, would cause protrusion of the tongue or eye, suffusion of the face, or congestion of the neck, even admitting that hauling a dead body out of a watery grave, by means of a rope round the neck, could cause a subluxation of the cervical vertebræ.

We deny that the face undergoes decomposition as soon as the abdominal parietes. We have inspected subjects in all states of decomposition, in the best supplied anatomical theatres in Europe, and never yet observed a single instance in which it so rapidly advanced on the face and head as over the abdomen.

Such being the case, we must express our firm and decided conviction that the appearances of the face, left eye, tongue, neck, left arm, the blister on the chest and the general state of the body, are wholly unaccounted for at present, and require farther elucidation.

We are much surprised that the coroner should receive certificates, not affidavits, from the officers at Woolwich, instead of requiring their personal attendance, as the law demands. No evidence was given as to the conduct of the persons on board towards the deceased, whether any enmity existed between the lad and any of the parties, officers, or fellow prisoners, &c. &c.

Under all the circumstances, we regret that a post mortem examination was not made, which, in our opinion, the coroner should have enforced, instead of delivering the body to the parish authorities.

The sage opinion that there was great danger from this body, after its being exhumed, at the expiration of fifteen days, from its interment, is preposterously ridiculous. In opposition to this foolish notion, we state, that a large number of the students of the medical school, at the Westminster

Dispensary, had examined and handled the body during Friday and Saturday, but not one of them, or of the residents of the Institution, was affected by contagion. We are not surprized that such an opinion should emanate from the Government Medical Officers at Woolwich, as of course they bow their heads to the Central Board of Health, that sapient conclave, who displayed so much profound wisdom in strenuously counselling Lord Durham to have the remains of his parent buried in a few hours after death, and that his Lordship who had stood by to receive the last benediction of his departing mother, should forthwith change his clothes, fly to the country for pure air, and to avoid contagion. We should like to know the exact number of the Board affected by cholera.

Hospital Report.

ST. THOMAS'S HOSPITAL.

Pistol-shot wound of the Throat.

JOSEPH B. aged 24, a Frenchman, of sanguine temperament, whilst partially inebriated, on the evening of May, in an hotel in Gracechurch-street, suddenly declared his intention to destroy himself, and before the attempt could be prevented had placed a duelling pistol to his throat, by the discharge of which he blew off the left horizontal ramus of the lower jaw, and a portion of the right, as far as the canine tooth, the greater part of the left superior maxillary and palate bones, so that the orbit and mouth were one common opening, exposing the pterygoid processes and pharynx, the vomer likewise being exposed, and the nose turned somewhat to the right side; a fracture extending through the nasal into the

orbital process of the right superior maxillary bone; considerable hæmorrhage had taken place, but had almost subsided soon after his arrival at the hospital. Mr. Tyrrell, under whose care he came in, was immediately sent for, and by the time he had arrived, by the application of cold water, all hæmorrhage had ceased. The pistol must have been held in an oblique direction, so that the slugs with which it was loaded entered at some distance under the jaw, did not wound the tongue, carried away most of the floor of the orbit, and then passed into the ceiling of the room, leaving the eye uninjured, which still performs its function. However, from the soft parts around it being so much lost, there will be little chance of its future preservation, or, at least, utility; so much of the soft parts of the cheek was not destroyed as might be imagined, excepting towards the orbit. Mr. T. brought the widely-divided parts into apposition by suture, an opening, however, to the extent of an inch remains superiorly, where every thing which passes to the pharynx may be perceived. Inferiorly, the two anterior bellies of the digastrici, the genio-hyoid, and parts of the genio-hyo-glossi, and a great extent of the soft parts, were destroyed.* Here it was impossible to make any apposition of the injured parts, so that the tongue, which was lying on the throat, was raised by a fold of lint, and supported by a poultice. His pulse was soft and ample at his admission, and has altered but very little throughout. His nutriment, which has consisted of beef tea, arrow root, and wine, has been administered till lately by the stomach pump; the power of deglutition, however remaining; this method has been discontinued, and his food conveyed to the pharynx by being poured into a paper tube. A fact is well exemplified by this case, which has been before noticed, viz. the abun-

* A large portion of the chin was picked up by the officer that brought him to the hospital, who wrapped it in a piece of brown paper, and brought it with him in his pocket,

dant secretion of saliva which is seen to pervade the greater part of the mouth, when taking food; this has only taken place, however, since the latter mode of administration has been employed, and the nerves of taste have exercised their proper function.

No secondary hæmorrhage has occurred, and but little sloughing; most of the surfaces are in a healthy granulating condition; the patient's strength keeps up, and to all appearance he will do well.

MR. WHEELER'S LECTURES AT THE BOTANIC GARDENS, CHELSEA.

To the Editors of the *London Medical and Surgical Journal*.

GENTLEMEN,

IN the notice of the Chelsea Botanical Gardens, contained in No. 16, of your valuable Journal, you make a very proper allusion to a certain episodic propensity in the lecturer, Mr. Wheeler. I had hoped that the effect of your hint would have been a strict appropriation of the time devoted to lecture, to the acquirement of botanical knowledge; and must confess my disappointment at to-day's lecture. Positively, gentlemen, all the strictly botanical information might have been conveyed in a quarter of the time, the rest being devoted to a rambling discourse on our power of creating or destroying matter; the radiation of caloric, with the experiments of Mr. Leslie, &c. &c. which all present ought to have known, and probably did know; the analyses of soils, including the chemical and physical properties of alumen, silica, lime, &c.; together with a long history of the production of botts, by which to explain a much more simple phenomenon. viz. the necessity for some seeds to exist in the alimentary tube of birds before being fit for the process of germination.

The lecture, although valuable in many respects, contained so much that was both irrelevant and tedious, that I shall feel obliged by your again noticing the subject, either by the in-

section of this, or in any other manner you may think proper, and again suggesting the propriety of adhering to the illustration of those botanical subjects for which there are such splendid opportunities and facilities.

I remain, Sir,

Your obedient servant,

A CONSTANT READER.

Borough, 30th May, 1832.

PRIZES PROPOSED BY THE ROYAL ACADEMY OF SCIENCES FOR THE YEARS 1832—1833.

THE following questions are proposed for the *physical prize*:—

Do the hollow vessels which M. Schultz has designated *vaisseaux du latex*, exist in the greater number of plants, and what place do they occupy? Are they separated from each other, or united in a net work by frequent anastomosis? What are the origin, nature, and destination, of the juices they contain? Have these juices, a motion of translation, and to what cause, internal or external, is it to be attributed? Finally, how far are we justified in adopting or rejecting the opinions of some modern physiologists, that the circulation of the juices in plants resembles that of the blood in animals?

Anatomical drawings after nature must be sent with the essays, which must be transmitted to the secretary of the Institute before the 1st of January 1833. The prize is a gold medal, value 3,000 francs.

Prize of Experimental Physiology (of M. de Montyon.

A prize, value 895 francs, will be accorded to that work, either written or printed, which the Academy shall judge to have contributed most to the advancement of experimental physiology. This will be determined on the first Monday in June 1832.

Various Prizes founded by M. de Montyon.

Prizes proportioned to the value of

the discovery will be granted to the authors of works, which are judged to have assisted the art of treating disease, and to those who have found the means of rendering an art or trade less unhealthy. Unless the discovery is real, and *bond fide* belongs to the claimant, it will not be granted.—*Bulletin des Sciences Medicales.*

BOOKS.

The Principles and Practice of Obstetric Medicine, in a series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children; illustrated by numerous Plates. By David D. Davis, M.D.M.R.S.L., Professor of Midwifery in the University of London. Part VII.

A short Treatise on the Cholera Morbus, or Indian Spasmodic Cholera; with suggestions for an Improved Mode of Treatment, and for Obviating Contagion. 8vo. pp. 84. Cork, 1832.

Practical Observations upon the Epidemic Cholera at Cork. By D. B. Bullen, M.D., one of the Physicians to the North Cholera Hospital, and one of the Surgeons to the North Infirmary. 8vo. pp. 28. Cork, 1832.

Remarks on Dr. Abercrombie's Suggestions on the Character and Treatment of Cholera. By a Young Physician. 12mo. pp. 16. Edinburgh, 1832.

An excellent piece of criticism.

Historical, Pathological, and Chemical Investigation on the Nature of the Sunderland Cholera. By W. Reid Clanny, M.D. London, 1832. Whittaker and Co.

The Midland Medical Reporter for May.

The Pharmacopœia Universalis, or complete Encyclopædia of Materia; containing all the European and American Pharmacopœias. Translated from the French of M. A. J. L. Jourdan, M.D. By James Rennie, A.M.F.L.S., Professor of Natural History, King's College. No. XIV.

Two numbers will now complete this valuable work, and these will speedily appear. This production requires only to be known to be encouraged.

A Manual of Percussion and Auscultation; composed from the French of Meridec Laennec. By James Birch Sharpe, M.R.C.S., Author of the Elements of Anatomy; designed for the use of Students in the Fine Arts. 12mo. pp. 118. One plate. London, 1832: Highley.

NOTICES TO CORRESPONDENTS.

Communications have been received from Mr. Forbes Winslow, Dr. Montgomery of Dublin, Freedom, A Student of the London Hospital, Delta, A Student at the Middlesex

Hospital, A Borough Student, H. S. M.W.H., A Pupil at Guy's, A Pupil at St. Thomas's, A King's College Student.

We beg to acknowledge the receipt of £1. from Dr. Montgomery, of Dublin, for the gentleman whose case we stated on the 5th ult. This letter, though dated May 8th, did not reach us until after our last Number went to press. Professor Green, of King's College, gave the sum of £1. 10s. to the same gentleman.

A Student of the London Hospital has no just ground for complaint.

A Student at the Middlesex.—We cannot admit this caustic comment.

A Borough Student will find his wishes attended to.

H. S.—The remarks are too personal.

M. W. H.—We go to press on Thursday night, and therefore do not publish the names of those that pass the Apothecaries' Hall on that evening.

A Pupil at Guy's complains of the irregular attendance of the surgeons, who are generally two hours later than the visiting hour; and thus the student's time is consumed without advantage.

A Pupil at St. Thomas's.—The reply of our correspondents to the strictures of the medical officer of Guy's, on one at St. Thomas's Hospital, could do no good; besides, the remarks were made in the wards, and never intended for publication.

A King's College Student.—We did not publish an account of the Medical Prizes, because we have not seen it. This writer is quite mistaken in supposing us hostile to the King's College; we are not hostile to that or any other institution in the kingdom, but we shall expose defects or abuses wherever they occur.

Mr. K.—Many thanks for the poem on the "Holy Alliance;" but a medical journal is not a fit medium for such an effusion.

There is a certain gentleman occasionally does us the honour of corresponding with us, but who, we are sorry to say, takes a great deal of *Freedom* with us. We last week declined inserting a letter of his, because it was too personal, and this week he favours us with an abusive letter, justifying his previous communication, and still urging its insertion. How can he expect that we will make our pages a vehicle for abusing a talented and estimable physician, for acting on a system which is in accordance with the rules of the institution to which he belongs. If Freedom will throw his remarks into another shape, and avoid personalities, we will willingly insert them; but he must be aware that the objects of this Journal are to correct defective and injurious systems, but not to attack private individuals, and from that determination we will not depart.

ERRATA.—Page 565, read, "less danger in breech than in feet presentations."

London Medical and Surgical Journal.

No. 20.

SATURDAY, JUNE 16, 1832.

VOL. I.

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,
During the Session of 1831 - 32 ;
BY BARON DUPUYTREN,
PRINCIPAL SURGEON OF THAT HOSPITAL.

*Diagnosis and treatment of Fractures of the
Neck of the Femur.*

THERE exists in the direction of the fracture infinite varieties, which require the minutest description. When the fracture is perpendicular at the neck, the fragments correspond with difficulty; they present no support; they glide continually on each other, and are rarely in apposition. When the fracture is oblique at the axis of the neck of the femur, the relations are equally difficult; but in these cases there are distinctions to be made; in fact, where the fracture is oblique from within outwards and from below upwards. In this last case the external fragment encounters no obstacle to deviate upwards, and the displacement is easy; in the other case, the external fragment finds a point of support on the internal and superior one, and the displacement is not so common. There is no means of recognising in which of these ways the obliquity has occurred; hence the indication of treatment is the same as if the fracture had occurred in the most favourable manner for displacement.

I beg of you to remark, that the seat of this fracture is either within the capsule, which is called *intra-capsular*, or external to it, and called *extra-capsular*. This distinction is important, and has been much insisted on by many practitioners, who think that it is very difficult, and almost impossible, that the consolidation of the fracture can take place within the capsule, but they admit it

is possible, and even very easily, accomplished without the capsule. Astley Cooper, whose authority is imposing in surgery, says explicitly, that in all cases of transverse fractures of the neck of the femur within the capsule, which he had occasion to examine, there never was seen an osseous callus. "The dissections which I have made," adds this illustrious surgeon, "have convinced me that the fragments of the fracture of the neck of the femur, when this happens within the capsular ligament, did not ever unite by an osseous callus; the re-union was made by a ligamentous substance only, as in fracture of the patella."

Persuaded that the consolidation of the neck of the femur is impossible, Astley Cooper has made experiments on living animals, which have confirmed him in his opinion. The English surgeons have equally adopted the opinion of their co-patriot. But if these are the facts that they advance to prove this non-consolidation, they can be opposed by contrary and very numerous facts. A considerable quantity of anatomical pieces, representing intra-capsular fractures of the femur, well consolidated, are to be found in the different museums. Those contained in the cabinets of the faculty of Paris, and of the amphitheatre of the Hotel-Dieu, really prove that this consolidation, with or without deformity, is real. Sir Astley Cooper has probably seen these fractures of the neck of the femur, which had not been cured, or which have been maltreated, or which have been partial. This is the only manner to explain the opinion of the English surgeon, which appears to us to be evidently erroneous. The examination of these pieces of pathological anatomy, is eminently proper to convince us of the reality of the consolidation of this intra-capsular fracture, does not appear, nevertheless, to have produced this effect on other English surgeons who have visited the museum of our faculty. Mr. Cross is said to have considered with care the pathological pieces preserved in the school of medicine of Paris, and not one among them did

appear to him to be of a nature to prove that osseous re-union had ever happened, when the head was completely separated from the capsular ligament, and when it did not communicate with the rest of the body by the round ligament.

When any one inspects the specimens shown in the Hotel-Dieu, he must be convinced of the consolidation. For myself, I am firmly convinced of it, notwithstanding the contrary opinions of the English surgeons.

Let us now consider the theoretical and practical reasons in favour and against the possibility of consolidation of intra-capsular fracture of the neck of the femur.

It is said that the superior fragment contains very few vessels, that it forms a true foreign body in the articulation. This assertion is untrue; the head of the femur receives evidently vessels from the cotyloid cavity by means of the round ligament. These vessels, without being very numerous or very large, can nevertheless suffice for the nutrition of the superior fragment. Again; the synovial membrane surrounds the cartilage, and forming at its base a little *cul de sac*, which possesses distinct portions of cellular tissue, and in which will be found a number of vessels. As to the inferior fragment, it receives a great number, by the principal nutrient artery of the bone, which enters at its posterior part, and which forms in the whole extent of the bone numerous ramifications which nourish it. Finally, by the arteries which surround it, by these which appear in the digital cavity of the great trochanter, and by all these which penetrate in the spongy tissue of the bone, and which sometimes run over its surface. The fibrous tissue, which envelopes the neck of the femur, contains a great quantity.

It is therefore evident that the inferior fragment receives much more vessels than the superior one, whose vitality is less active, more languid; and that for effecting the consolidation, the inferior fragment which enjoys a free exercise of all these vital properties, performs almost alone the consolidation; but it is not less true, that the superior fragment contributes to the process. The assertion relative to the absence or paucity of the vessels destined to nourish the fragments, is therefore valueless; the anatomical examination of the parts completely refutes it.

A cause which has been considered almost insurmountable to the re-union of the fragments of the neck of the femur, is the absence of periosteum about this part of the bone. Here is a grand error; the neck of the femur possesses a periosteum, thin, no doubt, but still apparent, and if not so capable of nourishing as that of other bones, nevertheless it is real. This thinness is a difficulty, and by no means an insurmountable obstacle to consolidation.

Others have said that the synovia conti-

nually bathes the fragments, and renders consolidation impossible. This reason would be good if the same anatomical disposition which is seen in various points of the osseous system prevented in any way the formation of callus. For no one is ignorant that fractures which penetrate into the joints consolidate very well, and the same thing happens to the olecranon and patella; in these cases it cannot be contested but the synovia bathes the fragments. Every one admits the consolidation of the olecranon, but some contest that of the patella. I shall relate a fact, which proves this beyond all doubt. A man fell upon both his knees, and fractured his patellæ, one longitudinally and the other transversely; the femur was cured without any deformity; the latter separated for some lines. The man died some years afterwards, when the longitudinal fracture could scarcely be discovered, except by a slight inequality in the ridge of the fracture. The other was all consolidated. These cases prove that fragments, bathed with synovia, may be perfectly consolidated. It is not the presence of synovia that offers an obstacle to that of the neck of the femur. The true cause which impedes, or renders very difficult, the exact and solid consolidation, and above all the great deformity, is the displacement of the fragments, their want of apposition, whether the fracture is within or without the capsular ligament.

Of the curative indications of Fractures of the neck of the Femur.

THE celebrated Louis observes in the most eloquent manner, "the science of diagnostic takes the first range among the parts of our art, and is the most useful and difficult, without an exact and precise diagnostic; theory is always defective, and practice often unfaithful. That which Louis, in his memoirs on fungus of the dura mater, said of diagnostic, I can repeat with no less reason of curative indications. A treatment which is not based on this is purely empirical, and it does not become rational unless it reposes on these indications.

At first it is supposed that in fractures of the neck of the thigh bone, as in other solutions of continuity, it is sufficient to reduce the fragments, and to maintain them in contact. But here many difficulties present. How are we to reduce fractures of the neck of the femur? Are we to make great efforts of extension and counter-extension? No, certainly, for this would be a most unhappy method, because it would augment the tension of the muscles, already too much by the morbid extension of the parts, and there would result contractions not more pronounced to the patient than to those who attempt the reduction. It is evident that if we can neutralise the action of the muscles, we shall effect the reduction very easily. But is it

possible to cause the muscular action to cease? The history of luxations leaves no doubt on this point; we act by diverting the attention of the patient, and then seize the moment for reduction.

But can it be done as easily in fractures as in dislocations? No, the affair is not the same, because the attention is entirely concentrated on the disease. It is therefore necessary to search for another mode of neutralizing the muscular action; Pott has indicated long ago, it is to place the diseased member in flexion; you have seen that under the influence of this position alone, the reduction was performed as if by enchantment, after it had resisted all efforts of extensions. It is very astonishing that Pott, to whom the honour is due of this semiflexed position of the extremities of fractures in general, has not said a word of its application to fracture of the neck of the thigh bone.

I believe I was the first who applied these rules to fractures of the neck of the femur. I suppose that in a case of this kind, extension and counter-extension are practised; we encounter all the difficulties established by Pott, and give rise to obstacles which cannot be always conquered; but if on the contrary we place the member in flexion, we find no difficulty to cause the displacement according to circumference and length to cease, and consequently the deviation of the foot outwards, and the shortening. But how are we to maintain the fragments in contact? In general by a proper apparatus and a bandage.

The apparatus and bandages are useful in fractures of the arm, legs, and thighs, or whenever they are flexible joints; but how can they be applied in fractures of the neck of the thigh bone? It is necessary for this to examine the disposition of the parts. The neck of the thigh bone is placed in the centre of a very thick soft part, inevitably escapes every species of bandages and apparatuses, so that it is surprising that practitioners have imagined to invent apparatuses, the principal action of which is exercised about the hip. Dessault has well supposed that all machines placed about this point, were altogether, or almost altogether, useless. He said that he will be deemed then to act upon the pelvis by a counter-extension to raise the superior fracture, and also on the foot to carry the inferior fracture from above downwards; such is the origin of the apparatus for permanent extension, one which has undergone an infinity of modifications, but which rests always the same as to principle. Dessault has then assigned the indications, without nevertheless having made the best application.

I shall not again go over the question as to the time of consolidation, which rests on the weight of the body and muscular actions. It will not be uniformly resolved, for many distinctions present themselves; if fracture of the leg is transverse, re-union is effected

in about forty days; it is the same for the tibia or fore-arm; but if the fracture is oblique in the different regions which I cite, I declare forty, fifty, or sixty days, will not suffice for the formation of the callus—why so? Because in fractures of this kind there is not solid support. If then you do not always maintain the fragments in contact, a long time after the fortieth day, a displacement will occur; the bones are in contact with inclined planes, the weight of the body and action of the muscles effect the displacement; because about the fortieth day there is only the formation of a provisional callus. If you remove the apparatus about this time, shortening will soon manifest itself, and it will be requisite to replace the apparatus. So then forty days will suffice for ordinary, and seventy or eighty for oblique fractures.

This also applies to transverse fractures of the patella and olecranon. If at the end of eighty days you remove the apparatus, you will find the limb in a good state; but if the patient walks, the fragments will separate, because the callus is not yet strong. These are the same as oblique fractures, where there is not a sufficiently long term in maintaining them in contact.

I suppose that fracture of the neck of the thigh bone is transverse; that the bone is divided into two parts, we can easily reduce the fragments, but the difficulty is to keep them in contact. The weight of the body will depress the superior fragment; if the patient makes the inferior fragment a point of support, it will be raised, but not sustained by the superior one. I suppose the fracture oblique of the head of the bone towards the great trochanter, from below upwards, and from within outwards; if the patient walks, the inferior fragment will slightly rise on the superior one; this fragment then offers some obstacle to displacement; but as it is elevated, it does not oppose itself but slightly; as often however as it does it will oppose the displacement, it will be less than in this last case, than if it had taken place easily in the perpendicular fracture.

On inspecting the limb, can we say whether the fracture is perpendicular or oblique? No, we should act as if the fracture had the greatest tendency to displace itself consecutively. We know that transverse fractures are cured about the end of forty days, while the oblique require sixty, and therefore in fracture of the neck of the thigh bone, place the member the longest possible time in the apparatus. But what is the duration of this time? It is evident that it will be less for a strong vigorous man, longer for old men, and longest for those whose constitutions are deteriorated. We establish a rule on this point, and that is, it requires a double period of time of this for the consolidation of fractures of the long bones. Alas! I have seen displacement at the end of this time. It is about the hundredth day that the formation of the definitive

callus, and even later, when the patients are aged, feeble, or deteriorated.

In recapitulation, the general indication is to reduce the fragments, and retain them in contact. The principle indicated by Pott very well fulfils this indication, in preventing the muscles from entering into contraction. The reduction is most difficult in perpendicular fractures. When it is oblique, there is less tendency to displacement, but it is difficult to discover this or the other fractures with certainty; but we must employ double the time for the consolidation of oblique fracture that is required for this kind of injury in long bones; and we must even add twenty, thirty, or forty days more, if we wish to prevent when the patient walks, consecutive displacement. When patients are treated in this way, I affirm that there is scarcely any shortening, that secondary displacement almost never happens, or if it occurs, it is very slight.

Two methods, to which I now call your attention, are employed by surgeons for effecting the reduction of fracture of the neck of the thigh bone. The one generally employed is extension, the other semi-flexion, which is principally due to us. When there is solution of continuity in the capsule, and the fragments are a little separated, and rub one against the other, there is no effort of extension supposed to be necessary; but we should act as if displacement existed, and place the limb in the apparatus. In the great majority of cases, the displacement is from half an inch to three inches, and their extension is necessary. In extension, the patient is to be placed upon his back, the pelvis strongly fixed, one or more assistants placing their hands on the inferior extremity, and making efforts of extension, bring back the limb to its natural direction; at the same time some one takes hold of the limb posteriorly, and executes a rotation from without inwards; but during these efforts the muscles may contract, resist, and conquer one or two assistants.

The best mode of operating for reduction of fractures in general, and for fracture of the neck in particular, is to diminish the resistance of the muscles, in putting them into a relaxation or demi-flexion, which is done easily in the following manner:—the patient being placed on his back, the pelvis fixed by assistants, the thigh is bent upon the abdomen and the leg upon the thigh, when moderate tractions are made. This manœuvre is executed with little pain or difficulty, and the inferior limb assumes, in case of displacement, its ordinary length, the foot its natural direction; this arises from the relaxation of the adductors, which turn the foot outwards, and the great, middle, and small glutæi, which direct upwards the inferior fragment. If the semi-flexed position is the best means to effect reduction, it is also in this we mean to place our apparatus to retain the muscles; this is the principle proposed by Pott, but by a very re-

markable singularity he did not apply it to fractures of the neck of the femur.

Two methods are therefore employed to reduce fractures of the neck—constant extension, the base of the treatment of Dessault, and constant relaxation, a method directly opposite employed by us. These I shall fully describe at our next meeting.

SELECTIONS

FROM

THE SURGICAL LECTURES

Delivered in St. George's Hospital,

BY

B. C. BRODIE, Esq. F.R.S.

Mortification.

GENTLEMEN,

INFLAMMATION may terminate in mortification; but mortification may arise from a number of other causes, as well as from inflammation. Some particular inflammations are more likely to terminate in mortification than others, as when they are produced by bites from venomous animals, or from wounds. A local injury may bring on inflammation, and that may cause mortification, but an injury may be so great, that the part which received the injury loses its vitality at once; therefore local injury can bring on mortification in two ways—first, by producing inflammation, and then by the inflammation terminating in mortification; and secondly, in destroying the vitality of the parts at once. Some parts of the body are more disposed to become mortified than others. These parts are—the cellular membrane, because it has a lower vitality than some other parts, hence the cellular membrane more readily mortifies than the skin, because it has less vitality than the skin, which more readily mortifies than the muscles, for the same reason, and this is often proved from blows or fractures of the leg, thigh, &c.; the integuments swell up; after a day or two you feel an emphysematous crackling, and if you cut down through the skin, you find the cellular membrane beneath dead; not only are some parts of the body more disposed than others to mortify, but some persons are more predisposed than others to have mortification after an injury. Those who are much addicted to drinking spirituous liquors, those whose constitutions have been much shattered by disease or noxious habits, are more predisposed than others to mortification, from a local injury, and so much so that the effect is beyond all proportion to the injury. If any fluid, such as wine, gets into the cavity of the peritoneum, it brings on inflammation; but if it gets into the cellular membrane, it will produce mor-

tification; you will find the patient's pulse full and frequent, not a hard pulse, and the part will be swollen; you put your hand upon it, and you feel an emphysematous crackling; the skin will be hot, and if there be extensive inflammation, there will be hiccough; the belly blown up with air; the pulse then becomes feeble; delirium comes on, and the patient dies.—Where there is internal mortification, the patient has the same symptoms. If he dies of external mortification, it is the cellular membrane that mortifies. But will not the skin also get mortified? Most certainly, if you do not prevent it; and it is to be prevented by making free incisions and scarifications through the skin down to the cellular membrane; and, if you do this in good time, you will generally prevent the progress of the mortification altogether. Whenever you suspect that the cellular membrane is mortified, and you have the emphysematous crackling, make free scarifications, let out the putrid gas, which is poison to the system. Having made the scarifications, the other local treatment will consist of poultices and fomentations to the part. You may apply, as a wash, the solution of chloride of soda, which, if it does no other good, will prevent all offensive smell from the part. With regard to the constitutional treatment, no general rule can be laid down. In some cases, where there is inflammatory action, purging and diaphoretics must be given; but when the inflammation has subsided, you must leave off the antiphlogistic remedies, and give stimuli to excite the system, but never to that extent as to produce fever. Your best stimulants will be opium and ammonia. Suppose a mortified part separates, we call this sloughing. I have already told you how little we know of this process, and which, in fact, is nothing more than ulceration. Whilst the process of sloughing is going on, it should be encouraged by means of poultices and fomentations; and after the slough has come away, there will be an ulcer, which you must treat, as I directed when on the subject of ulcers. But may you not amputate? I think you may amputate when mortification is going on. Of course you would not amputate when mortification in the cellular membrane is complete. You are told to scarify; and what is amputation but scarification, in a more extensive sense? When mortification is the consequence of contusion, it is to be treated as contusion. If you feel the emphysematous crackling, scarify the part, and you save the skin. Old persons are subject to ossified arteries. In them the femoral, profunda, and popliteal arteries, sometimes ossify; and if the ossified arteries contract, the patient is likely to have inflammation of the toes, terminating in mortification. The symptoms are—pains in the toes, the foot and leg of that side a little œdematous, or, perhaps, from an accident, slight inflammation may be produced, and in both cases mortification

is the consequence; another time you will find the patient's feet get very cold; he immediately applies warmth, and takes internal stimulants, and the mortification is averted, but if it is neglected the foot gets white and cold; the patient complains of great pain, and the toes begin to mortify at their extremities. In either way the progress of the mortification is different. It is sometimes rapid, when it is called "acute"; it passes up the foot, the pulse is frequent, the skin hot, rigors come on, delirium, and then death. Or it may be of a slow nature, the pulse may be feeble, the skin cold, the patient falls into a state of coma, and then dies. Mortification that occurs in the toes from ossified arteries, may not be destructive to life, but most generally is so; in such a case, when inflammation ends in mortification, it may be a question (if the pulse indicates fullness) whether blood should be taken from the arm or not. I think the practice of venesection in such cases, has generally been unsuccessful. With respect to the local remedies, let the parts be kept warm; but if they are inflamed and hot, you may apply cold lotions, or warm fomentations and poultices. Some practitioners recommend you to rub the leg above with stimulating liniments, but I do not think that these effect any good. Keep the patient still in bed; if there is much pain give him opium, and keep him quiet. Opium is not always useful, only when there is great pain; then you give it in large doses, one grain every four hours. Stimulants may be given internally, for although in these cases you cannot increase the diameter of the arteries, you may increase the celerity of the circulation of the blood; give a little wine, but not enough to induce fever; but in cases where patients have been accustomed to drink a great deal of wine, it may be necessary even to give such a one a bottle of wine a day. I think ammonia is the best stimulant; you may give six grains of the carbonate of ammonia every four hours. The parts that are mortified become putrid, and if all goes on favorably, they will separate. This process of separation in the foot is very slow, because it has to slough through tendons, ligaments and bones. Are you to amputate then in these cases of mortification from ossified arteries, and when? If things are favourable, the parts will separate, and nature will make a very good stump, with a little assistance of the surgeon, by his sawing through the bone. But should you amputate during the process of mortification? I always oppose it: I think you should never amputate under these circumstances, but it is nevertheless done sometimes. In old persons, who die of mortification of the toes, the femoral artery is usually contracted. Whether this is caused by inflammation of the coats or not, I do not know. There is another disease of the arteries causing mortification, but I have only seen three cases of the kind; one was an obliteration of the femoral artery,

caused by inflammation of its coats; the symptoms consisted of pain and tenderness in the course of the artery. In this case the sloughing process went on well, it separated down to the bone, which I sawed through, and a good stump was formed. Why does not mortification come on after applying a ligature to the femoral artery? If you tie an artery, the obliteration is only in the trunk of the artery, but not in the anastomosing branches; but in a case like the above, the obliteration is not only in the trunk, but in its branches also. Mortification will also occur in the toes after typhus fever. In such a case as this, it is of course owing to a languid state of circulation, and from the same cause parts, at the extremities of the body, may become mortified after other diseases. Besides the causes producing mortification, which I have hitherto mentioned, there are various others that may produce mortification, as the actual cautery; the various caustics by destroying the vitality of the part; the actual cautery acts mechanically; the caustics chemically; but there is one caustic, however, which acts only on the vitality of the part, and not chemically—this is arsenic. The other caustics act on the dead body, but arsenic does not. The local treatment for these cases is the same; apply poultices and fomentations, and wait for the process of separation. Indeed a surgeon should do but little. Let him look to the constitution, and judge if it is able to go through what is required of it; if it is so, let nature effect the cure; but if the constitution cannot bear up with the process of separation, you must act according to the circumstances that present themselves. Of the non-enclature of mortification, I should have spoken before; let me, however, do so now. You will find in authors the words gangrene and sphacelus. The first of these words signifies when the parts are not quite dead; the second means when the mortification is complete. From gangrene the parts may recover; from sphacelus they never can.

EXTRACTS FROM

LECTURES ON SURGERY,

Delivered at Guy's Hospital, 1831—1832.

BY C. A. KEY, ESQ.

On Syphilis.

SYPHILIS is the result of a poison communicated from a female subject to the penis of the male, producing chancre.

The poison of syphilis is peculiar, it is different from variola, measles, &c. &c. The same poison producing in different individuals different symptoms, and a variety of diseased appearances. Mr. Hunter's descrip-

tion of the different kinds of chancres, tallies with that given at present of these diseases. Chancres are modified by a great many circumstances, several persons having connexion with the same female, but those different individuals have sores different in appearance one from the other, although produced by the same virus. I believe that these differences arise from the situation of the sore more than from idiosyncrasy of individuals; but I believe also, that a great deal depends on modifying the character of the primary sores. The simplest kind of sore is that called the aphthous chancre; this generally heals without mercurial treatment; it arises on the glans, penis, or inside of the prepuce, it is a small superficial oval ulcer, without a hardened base, the surface is covered by a yellow secretion.

It appears about the third day after connection; this sore is in general easily managed, if cleanliness be attended to, and no irritation produced on the part; but if irritated it produces phymosis, and becomes a sloughing irritable sore, very difficult to manage; the chancre of the prepuce sometimes extends to the scrotum, &c.

The irritable chancre most commonly appears near the frænum, it becomes very irritable and difficult to heal; it seldom goes to any great depth, it is about the size of a common pea, it becomes inflamed about the edge, covered by a yellow matter, and there is great difficulty in dressing it. This sore never will heal in less than four weeks. A great deal depends on the mode of treatment; you should give mercury very gradually, otherwise you increase the irritation and do harm.

Irritable sores about the frænum, the result of irritation, are frequently mistaken for chancres. In such cases mercury does not agree with the sores, in fact it renders them more irritable, and they grow worse. In such cases give purgatives, apply astringent and sedative lotions; the nitrate of silver, with extract of poppies and decoction of poppies, are found to allay irritation considerably; you may at the same time give the decoction of sarsaparilla, with or without acids; if there is restlessness at night, give Dover's powder. A solution of half a drachm of extract of poppies in lime, in an ounce of water, and mucilage of acacia, tends to allay the irritability of the sore very much. Mild astringents sometimes bring the sores to a healthy condition. A grain of sulphate of copper in an ounce of water is found useful. These sores seldom lead to dangerous consequences.

The phagedenic ulcer of the penis, or simple irritable chancre.—If the exhibition of a tolerable quantity of mercury does not stop the progress of the phagedenic disease, stop giving this medicine to a great extent. Mix sulphate of quinine, grj. with two grains of pilul. hydrarg.—give this twice a day; this combination appears to have affected the sys-

tem, and removed the disease in several instances.

When other means fail, the application of a lotion, composed of calomel ℥j. liq. calcis ℥vj. extract papaveris ʒss. and also the yellow wash, with the extract of opium, are found to induce a healthy and granulating aspect, at the same time continuing the quinine and blue pill twice a day. A combination of olive oil and oil of turpentine gives decided relief in inflammatory affections of the penis, in phymosis, and threatening phagedenic.

To improve the general health, nothing is equal to a combination of opium, capsicum, and quinine; the phagedenic sore is prevented, spreading under such treatment. You will find advantage from camphor, quinine, and capsicum, of each two grains, which given every four hours, arrest the progress of the phagedenic sore of the prepuce.

INFLUENCE OF THE MIND.

An Inquiry into the probability of the Mind of the Mother influencing the health and formation of the Fœtus in utero.

By FORBES WINSLOW, Esq.

In a paper which I had the honour of reading before the Members of the Westminster Medical Society, on the *influence of mental causes in giving origin to disease*, I briefly alluded to the influence which the imagination of the mother is supposed by some medical writers to have over the fœtus in utero. It is now my intention to enter more fully into this deeply interesting and important subject. The origin of the belief of the influence of the imagination appears to be coeval with our earliest records. Hippocrates, who was a firm believer in the influence of the imagination of the mother, saved by his testimony a noble woman, who had been charged because she had borne a coloured child (the then husband being white), by alleging that the darkness of its colour was the effect of a picture of an Ethiopian, which hung in her chamber, and which was often the object of her contemplation. Galen was also of opinion that a picture was sufficient to give a corresponding appearance to the fœtus in utero. Cælius Rhodius informs us, that Fabius Quintilian saved a woman from suspicion after she had brought forth a little negro, by his assertion that the circumstance arose from her taking great pleasure in viewing the picture of a negro suspended in her chamber, and which was supposed to act through the medium of the imagination on the child.

It was from the prevalence of this popular belief that gave origin to the first and perhaps most beautiful-novel ever penned; it is called the *Lives of Theagenes and Characlea*, by Heliodorus. Characlea was born white from

Ethiopian parents, and her white colour was attributed to the influence of her mother, the Queen's imagination, she having viewed during her pregnancy the picture of Adromeda, which was painted with a white face. That the belief in the influence of the imagination over the body is of very high antiquity, appears from the account preserved in the sacred writings of the contrivance which the patriarch Jacob is represented to have employed, in order to augment the number of calves, lambs, and kids, which according to the agreement between Laban and him were to fall to his share. Jacob is said not only to have placed rods of trees in part stripped of their bark, so as to appear spotted, but also to have placed spotted lambs before the flock during the intercourse of the sexes.* The tyrant Dionysius, who was deformed himself, in order that he might have a comely issue, is said to have always had a beautiful picture set before his wife in the bed chamber, that by the force of fancy and imagination, she might conceive the likeness of it. It appears that this notion of the influence of the mother's imagination was most general among the ancients. Galen, in his *Epistles* to Piso, remarks that the ancient Greeks and Romans, in order to have beautiful children, took especial care that the mother should behold agreeable pictures only, beautiful statues, and other objects fitted to excite the most pleasing and delightful mental images. The poet Hesiod entertained a notion that the condition of the father's mind influenced in a great measure the health of his children. He does not attempt to account for the fact on any physiological principles, but he simply exhorts his friends not to set about the work of procreation after they return from *funerals*, lest the sorrowful idea be transmitted to the conception, and the tender fœtus in utero be marked with some frightful character.

With regard to the influence which the mind of the father has upon his offspring, we are unable, owing to a deficiency of *data*, to form any correct opinion. It is a well known fact that the mind has a decided influence over the different secretions of the body; it influences the bile, the mother's milk, and the saliva, and it is not at all improbable that it should effect *seminal secretion*. We know that many diseases are transmitted from a male parent to his children; these are called hereditary diseases, and how are these diseases communicated to his offspring but through the medium of the semen. It is only in this manner that we can satisfactorily account for the communication of the venereal disease to the fœtus in utero. A man who is labouring under secondary syphilitic symptoms, has a child born with the same complaint; the mother is free from primary symptoms, and the father is free, and therefore the disease can only, as has been ingeniously conjectured by

* Genesis xxx. v. 41.

Mr. Lawrence, be communicated to the fœtus and the semen. I have been long inclined to think that the notions of Hesiod, though to some who will not give themselves the pains of thinking on the subject, they may appear visionary and ludicrous, not altogether destitute of foundation. I believe the mind of the male parent can only affect his offspring by producing an effect on the seminal secretion—but more of this at another time.

With regard to the connexion supposed to exist by the ancients between the brain of the mother and her fœtus, Malbranche has some curious observations. Malbranche applied this doctrine of communication to explain the general resemblance which the offspring bears to the parents. He says that infants in the womb have the same notions with their mother, labour under the same passions, see the same things, and have the same thoughts. This doctrine of communication between the mother and infant, and the influence of the imagination of the mother on the fœtus in utero, has been revived in modern times by a distinguished anatomist and physiologist, Sir Everard Home. This distinguished comparative and human anatomist, in a Croonian lecture delivered before the Royal Society, Nov. 18, 1824, "on the existence of nerves in the placenta," endeavours to prove that there is a connexion between the brain of the mother and that of the fœtus, by the medium of nerves. "Now that it is known," says Sir Everard Home, "by the discovery of nerves in the placenta, that the brain of the child, as well as every part of the body, is connected by the medium of nerves, we are led to understand the degree of dependance in which the fœtus is kept during the whole time of utero-gestation. Till this discovery was made (continues Sir E. H.) we had no mode of estimating the influence that could be produced upon the child, by the affections of the mind or body of the mother; and therefore the instances that have occurred were considered as idle stories or accidental occurrences, for which no satisfactory reason could be assigned; and this upon no better ground than that they do not always take place under similar circumstances, which nothing connected with nerves ever does. That they do sometimes occur, no one will be so hardy as to deny, and when they do, we cannot now be at a loss for a mode of accounting for their doing so." In confirmation of this opinion, the author proceeds to relate several well-authenticated cases, in which the mind of the mother has sensibly affected the fœtus in utero. If a nervous communication between the brain of the mother and that of the fœtus be satisfactorily proved to exist, there would be, in my opinion, no difficulty in proving, beyond a doubt, that any great mental agitation of the mother must necessarily affect the condition of the fœtus. If the arteries depend for their action on a supply of what is called

nervous energy, the arteries in the placenta must also have transmitted to them a supply of the same principle, in order to enable them to perform their healthy functions. Every idea which enters the mind must produce an action more or less in the nervous system. Sensations must be transmitted by the nerves to the sensorium, in which organ perception takes place. The action in the nervous system is in proportion to the nature of the idea which enters the mind. If an irritable, nervous woman, in a state of pregnancy, is agitated by any frightful idea, a violent commotion takes place in the nervous system; and if the statement of Sir Everard Home be correct, regarding the nervous communication between the mother and child, there must be much absurdity in supposing that a violent agitation of the mind of the mother should cause a corresponding affection of the nervous system of the fœtus; and as the due and healthy performance of the arteries which deposit the nutritious matter depend upon the healthy action of the nerves, any great derangement in the nervous functions must necessarily modify, and in some degree affect, the corporeal frame of the infant. In what other way can we account for the malformations with which children are sometimes born. It is a well-known fact, that women who are subjected to little or no mental anxiety—women who live out of the vortex of fashionable life, have almost uniformly healthy and well-formed children. I am quite confident of the truth of what I state, that the *future good health of a child will, in a great measure, depend upon the state of the mother's mind.* Many continental physicians, and physiologists of great eminence, have delivered the same opinion on the subject. M. Esquirol has had many opportunities of noticing how much the mind of the mother affects the future mental health and constitution of the offspring. For this reason he tells us, that it is often in the natural womb that we are to look for the true cause, not only of imbecility, but also of the different kinds of mania. He observes, that during the French revolution, many ladies then pregnant, and whose minds were kept constantly in a stretch by the anxiety and alarm inseparable from the epoch in which they lived, and whose nervous systems were thereby rendered irritable in the highest degree, were afterwards delivered of children whose brains and nervous systems had been similarly affected to such a degree by the state of the parent, that in future life, as children, they were subject to spasms, convulsions, and other nervous affections; and in youth, to madness, imbecility, or dementia, almost without any exciting cause. The extent to which the temporary state of the mother, during gestation, may influence the whole future life of the child, may be conceived from a single fact recorded by the same author. A pregnant woman, otherwise healthy, was greatly alarmed by the

threats of her husband in a state of intoxication; she was afterwards delivered at the usual time of a delicate child. The child had, however, been so much affected by its mother's agitation, that up to the age of eighteen it continued subject to panic terrors, and then became completely maniacal.*

The physician may learn a very important practical lesson from these facts. They demonstrate to him how careful he ought to be in pointing out to those entrusted to his professional care, the evil consequences likely to result from great mental perturbation. How often do we witness nervous and irritable females, far advanced in gestation, exposed to great sources of mental agitation, and what is the result? In a great majority of instances they give birth to weakly and unhealthy children. Every thing calculated to excite the nervous system ought to be most religiously avoided by females in a state of pregnancy: they should debar themselves, for a short time, from the mental excitement inseparable from midnight balls, theatrical representations, and morning concerts. To those unacquainted with the intimate connexion subsisting between the nervous and vascular systems, and to the influence of the mind, or the health of the corporeal frame, it may appear visionary and ludicrous to lay down rules for the mental management of individuals placed under these circumstances. But the practical physician will think otherwise; he will, if he performs his duty, and if he has the interest of his patient and her offspring at heart, recommend her studiously to avoid anything likely to excite the mind and agitate the nervous system. The ancient physicians, who by-the-by were more observant of nature than many of the faculty of the present day, bearing in mind this important principle, have recommended that women in a state of pregnancy, should carefully avoid all causes which have a tendency to rouse the animal passions; that their minds should be kept calm and free from all excitements. Is this advice acted upon in the present day? How often has the physician the pain of witnessing the most delicate and nervous women exposed to scenes calculated to rouse, to the highest pitch of excitement, the nervous functions. Not many months ago a female, far advanced in pregnancy, was so excited by a theatrical representation which she was witnessing, that she was removed from the theatre in a state of labour, and the poor infant which she gave birth to was born dead. It is the imperative duty of the physician to point out to his patient the danger of thus trifling with the health of herself and offspring.

With respect to the general influence of the imagination on the body, it is not my intention in this essay to minutely consider. That the imagination has a powerful effect

on the health of the corporeal functions, no individual, gifted with observation and reflection, will for one moment question. If we examine the history of quackery, we shall discover what a powerful instrument of cure these unlicensed practitioners have availed themselves of—how many diseases, which have baffled the most scientific and experienced of the medical faculty, have been successfully grappled with, by acting upon the body through the medium of the mind. Let us continually bear these facts in remembrance, never forgetting a principle which is as applicable to the science of medicine as it is to politics:—

“Fas est ab hoste doceri.”

DR. STOKES AND DR. EPPS'S ACCORDANCE REGARDING OPIUM.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

The following extract from a lecture of Dr. Epps, delivered in February, 1832, is strikingly in accordance with some of those interesting statements contained in the article on opium, by Dr. Stokes, in the 17th Number of *The London Medical and Surgical Journal*:—

“You will remember, Gentlemen, that I have always disputed the common dogmas regarding the *local* operation of medicines. The *local operation of a remedial agent* I have always endeavoured to prove is dependent *principally* (in cases of disease I refer to) *upon the affection and the part affected*, i.e. that if a medicine, which, in a state of health, acts, we will say, upon the *nervous system*, is given to a patient afflicted with a diseased state of any particular organ, the medicine will be localized in its operation to that organ, and will not produce its effects upon the *general nervous system* until the *diseased* state of the particular organ is either removed or relieved. This I beg to illustrate to you on this occasion by a fact in reference to the exhibition of opium, in a case of affection of the kidney. A. B. aged 50, a gentleman, virtuous and of regular habits, but liable occasionally to discharges from the urethra, especially after persevering in the use of beer, was troubled with a discharge. He took some diet, which partially stopped the discharge. Shortly after he was seized with intolerable pain in his back, in the region of the kidneys. I was sent for, and, on my arrival, found him in the most intense agony; his pulse quick and hard; he could not sit up, and in the reclined posture could not remain in one position for more than ten seconds; the discharge of urine was not free. Perceiving that the case, though bearing many marks of inflammation, was one in a

* Combe on Mental Derangement.

great measure dependent upon a peculiar *nervoso-irritable* condition of the kidneys, I prescribed the following mixture:—

R *Tinct. ferri muriatis*, ʒiij.

Liq. opii sedat. ʒij.

ft. mist. guttæ xv. primo quâque quartâ horæ parte per duas vices; dein, quâque secundâ horâ donec dolor abest.

“On calling the next morning, I found that five or seven minutes after taking the *first* dose, the pain was relieved very considerably. After the second, a more considerable diminution took place; and after the third, the patient fell into a comfortable sleep, and awoke on the following morning very much better. I recommended him not to take any of the drops at night unless the pain should come on, and then not to take more than one dose.

“However, the patient having felt so much benefit the previous night, and fancying perhaps that he would anticipate the pain, took two doses of the mixture, and, mark the consequence: he fell asleep, but awoke almost immediately with such *horrible dreams*, that he begged he might not be allowed to go to sleep again. He dreamed, for instance, that one of his children was brought to him, having a pig's face, which was slit down by a deep incision from the crown to the snout, and the blood flowing.

“This gentleman, I afterwards ascertained, was always made to dream when opium had been previously given to him.

“Why then, I ask, did he not on the *first* night of the exhibition experience the same effects? Because the operation of the opium was localized by the *peculiar condition of the kidneys*, in altering which, if I may so speak, the power of the opium was exhausted, and no effect was produced upon the brain. On the *second* night, the same condition that localized the action of the opium on the preceding evening *not* existing, the patient's cerebral system was affected, and that intensely as was described.

“This view will explain another fact in reference to opium, namely, the immense quantities that can be administered with safety to persons labouring under *disease*. The power of the opium is *localized in its operation by the diseased state.*”

“If these views, which Dr. Epps has been in the habit of inculcating for the last six months, be compared with the cases recorded in the interesting paper of Dr. Stokes, a striking illustration will be afforded; and, what is more, these remarks are in perfect accordance with the remark of Dr. Stokes, in a foot note;—“It is most interesting, that in this case and in another, no narcotism was produced *until the patient was convalescent*, as if the existence of the disease caused the tolerance of the opium.”

GAMMA.

June 1st, 1832.

NEW AND EFFECTUAL REMEDY FOR DIARRHŒA.

MR. KERR, of Paisley, has published two papers, one in the *Edinburgh Medical and Surgical Journal*, and the other in the *Glasgow Medical Journal*, on the efficacy of the persesqui-nitrate of iron in diarrhœa, and of the affections of the intestinal mucous membrane. He relates several cases of diarrhœa occurring at all ages, which were speedily cured by this medicine. It is prepared as follows:—Take of small chips, or pieces of iron wire, an ounce and a half; nitric acid three ounces, by measure; water, twenty-seven ounces; muriatic acid, one drachm; put the iron in an earthen vessel, and pour on the nitric acid, previously diluted with fifteen ounces of water; set the vessel aside till the whole of the acid has united with the iron, so as to form a persesqui-nitrate; then decant the liquid from the portion of the iron which remains undissolved, strain, and filter; add the muriatic acid with the remainder of the water, or with as much of that liquid as will increase the whole solution to thirty ounces. The solution is completed in a space of time varying from seven to twelve hours, according to the concentration of the acid and the thickness of the iron. The solution is of a very dark red colour; its taste is very astringent, but not caustic. It may be given in doses of eight drops twice a day to children of two years of age, and from 10 to 15 drops twice a day to adults; but in severe cases one or two drachms may be given every hour. Each dose is to be mixed with warm water, sweetened to the taste when there is vomiting, or in cases of children, there should be little water with a large proportion of loaf sugar. After the diarrhœa has ceased, the medicine ought to be continued for some days longer to restore the bowels to a healthy state. It is said to have been found efficacious in all cases of diarrhœa, except those succeeding dysen-

tery or typhus, in which there is generally ulceration of the intestinal mucous membrane. Several cases are detailed, in which the ordinary remedies had failed, and in which a cure was effected by this medicine. The sudden cures in many of these cases were so remarkable as to excite almost a doubt that this remedy is too highly appreciated; but we think it well worthy of trial.

DR. HARVEY AND THE WITCH.

"ONCE asked him what his opinion was concerning witchcraft; whether there was any such thing? Hee told mee he believed there was not. I asked him what induced him to be of that opinion? He told me that when he was at Newmercat with the King, he heard there was a woman who dwelt at a lone house on the borders of the Heath, who was a reputed Witch; that he went alone to her, and found her alone at home, alighted and went into the house to her. Hee said shee was very distrustful at first; but when hee told her hee was a vizard, and came purposely to converse with her in their common trade, then shee easily believed him; for, say'd hee to mee, "you know I have a very magical face," and looking upon mee, and gathering upp his face, I indeed thought hee had.

"Dr. Harvey asked where her familiar was? And desired to see him. She immediately fetched a little milk and put it in a flat dish, and went to a chest and chucked with her mouth as toades doe when they call one another; and immediately a toad came from under the chest, and drunk some of the milk. * * She said there was ale to be sold about halfe a mile thence; hee desired her to fetch some, whilst he stayed, and gave her a shilling; away she went for the ale. —Hee tooke milke, when shee was a goode woye on her way, went to the chest, chucked as shee did, the toad came out. His *tongues* (tongs) were ready in his hand, he caught up the

toad in them; his dissecting knife was alsoe ready, he opened the toads belly, out came the milk. Hee examined the toads entrayles, heart, and lungs, and it no ways differed from other toades, of which he had dissected many of, ergo it was a playne natural toad. The old woman was melancholly and poore; found the toad some evening abroad eating spiders, for hungry toades will eat spiders, and other reptiles or insects; carried it home, made it tame by feeding it, and so it became a spirit, and that spirit a familiar. From hence he concludes there are no witches very logically; his argument in effect is this; —A woman had a tame toade, which she believed to bee a spirit and her familiar; the toad upon dissection proved an arrant naturall toad, and had really eaten milk, and not in appearance onely, therefore there are no witches. The good Doctor, upon the woman's returne, who found him busy in observing that the toad would die in the pickle hee had put him in, was in danger to have a more magical face than hee had before, and habit too; the woman let or rather threw downe the pitcher of ale, flew like a tigris at his face; 'twas well hee had nothing but bare bones and tough tanned skin, neyther hair nor bearde, and 'twas well his eyes were out of reach, well guarded with prominent bones, otherways it had gone ill with him; but for his short very short old black coat, that scaped not so well, that pay'd for killing the poor woman's Divell."

The article from which the above is extracted, is exceedingly curious; it illustrates the manners of the times, when every infirmity was supposed to be the effect of witchcraft, and every old woman suspected of being a witch. The Dr. Harvey who figures in the story, is the celebrated physician who discovered the circulation of the blood.

Gentlemen's Magazine for May.

Hyperanthrax; or the Cholera of Sunderland. By W. REID CLANNY, M.D. F.R.S.E. M.R.I.A. Physician to H. R. H. the Duke of Sussex, &c.

DR. CLANNY is entitled to the merit of having, by his experiments on the blood in typhus, revived the pathology of the fluids, and confirmed the views on humoralism, maintained for a long time previously by Dr. Stoker, of Dublin. Soon after the publication of Dr. Clanny's work on typhus, Dr. Stevens read a paper before the Royal College of Physicians, in which he detailed his experiments on the blood in yellow fever, which entirely coincided with the conclusions of his predecessor, and of which we gave the first account in the monthly series of this Journal. The pathology of the blood now claims very general

attention; and among those who consider it of vast importance are Andral, Elliotson, Graves, and many others.

In the work before us the author gives an analysis of the blood in cholera, and in a healthy state; and Professor Thomson, of Glasgow, has subsequently arrived at the same conclusions, as appears by the *Philosophical Magazine* for May; while Dr. O'Shaughnessy dissents in some measure from both.

The following table shews a remarkable coincidence in the results by two physicians whose experiments upon this important subject were, it is presumed, unknown to each other, and sets the matter at rest as to the chemical changes which take place in the blood of cholera patients:—

	Healthy Blood.		Cholera Blood, No. 1.		Cholera Blood, No. 2.	
	Dr. Clanny.	Professor Thomson.	Dr. Clanny.	Professor Thomson.	Dr. Clanny.	Professor Thomson.
Water.....	75.6	78.4	72.0	66.1	64.4	67.9
Albumen.....	12.1	8.5	6.1	4.9	3.1	6.3
Fibrine	1.8	4.4	.6	.4	.6	1.3
Colouring matter	9.1	7.4	21.0	27.4	31.9	23.2
Salts.....	1.4	1.3	.3	1.2	.0	1.3

We shall now insert the results of Dr. Clanny's chemical investigations of the vomited fluid of a cholera patient:—"I submitted the vomited fluid to the exhausted receiver of the air-pump, but could not find any gas of any description." The following are the results of the analysis:—

Water	951
Fibrine	5
Albumen	1
Carbonate of soda. .	2
Animal extractive. .	1
	1000

The following results were obtained by analysis of the dejected fluid:—

Water	989
Fibrine	6
Carbonate of soda. .	3
Animal extractive. .	2
	1000

From Dr. Clanny's tables it will be seen at a glance, that all that is deficient in cholera blood is invariably found to exist in the vomited and dejected fluids.

We can by no means assent to the conclusions of Drs. Clanny, Thomson, and O'Shaughnessy, as they are at variance with those of Brande, Berzelius, on healthy blood. The eminent chemists whom we name agree that the hematose, or colouring matter of the blood, is an animal jelly, and contains nitrogen. Now Dr. Clanny makes no mention of this gas, or of any of its combinations, though they are discoverable on a careful analysis, and therefore his experiments have not been performed with proper care, and Dr. Thomson's are also inconclusive. Neither de-

scribes the empyreumatic oil nor water, described by former experimenters.

Berzelius maintains that the usual quantity of carbon is 53.360, and Michaelis $53\frac{1}{4}$, while Dr. Clanny makes it 66 in cholera blood; but it is well known that a considerable excess is a natural result unconnected with disease. Dr. O'Shaughnessy asserts that Dr. Clanny has absolutely shewn by his analysis, a deficiency of 25 per cent. of carbon in cholera blood.

This writer offers the following deductions from the several facts and observations he has brought forward.

" 1. That the universality of the diminution of the quantity of water in cholera blood is extensively and satisfactorily confirmed.

" 2. That a moderate diminution took place in the salts of the serum in the individual instance Dr. Thomson examined.

" 3. That Dr. Thomson's *calculation* of the quantity of salts in other cases is inadmissible, because the quantities vary in every case.

" 4. That the apparent excess of colouring matter in the blood is chiefly dependent on the mixture of albumen, owing to the defective process employed in the analysis.

" 5. That this admixture of albumen is especially liable to take place in examinations of cholera blood, owing to the bulk of the crassamentum, and the quantity of serum it retains.

" 6. That nevertheless the same process may give correct results on standard blood, owing to the comparatively minute quantity of serum retained by the crassamentum. A great apparent difference, therefore, in the results of a standard analysis, and of cholera analysis, performed in the same manner and by the same individual, is not a proof of correctness in the estimations of the ingredients in cholera blood.

" 7. That the quantities of fibrine and albumen obtained by Dr. Thom-

son, were not below the natural standard."

" I should briefly state that the results of my own experiments indicated, *first*, a material diminution of water in the blood of the cholera patient, the specific gravity of the serum ranging from 41 to 54; *secondly*, a notable decrease in the quantity of soluble salts, amounting, as far as regards the serum, to a mean loss of one-third of these substances; *thirdly*, that the solid constituents of the crassamentum, including its salts, retained their normal *proportions*, wanting merely the addition of water to restore it to the standard state; and, lastly, that the dejections were alkaline and albuminous, and contained the water and soluble salts in which the serum of the blood was deficient."

Though great praise is due to Drs. Clanny, Thomson, O'Shaughnessy, and the continental physicians, who have analysed the blood in a healthy state and in cholera, yet it appears to us that their results are highly unsatisfactory, and cannot lead to any useful practical result. There are many insuperable objections to the conclusions made by all chemists upon the composition of the blood, either in health or disease. Experiments upon the blood of half-a-dozen individuals, even if their ages, temperaments, habits, sexes, constitutions, states of health, or diseases were taken into account, which was not done by any one of these or other experimentalists, could not warrant a just conclusion as to the condition of the blood in health, or in cholera. This position is admitted by all those who have made experiments upon healthy blood, and accounts for the contradictory results which were deduced, and hence no two chemists, however able, have as yet given exactly the same analysis of the blood. But it is impossible that they could have agreed, as the present state of our knowledge of medicine does not admit of it. The infinity of constitu-

tions arising from hereditary peculiarities comprising, to an illimitable extent, combinations of diseases, will most probably for ever prevent the chemist from arriving at a correct analysis of either healthy or diseased blood. He must remember that the natural proportions of the constituents of the blood offer an immense number of varieties according to age, sex, temperament, constitution, habit, climate, state of health, hereditary predisposition, aliment, mode of life, and disease. Thus the crassamentum predominates in the blood of those who have rarely submitted to venesection, in inflammatory diseases, in robust constitutions, in those of a sanguineous temperament, in the male sex, at the virile age, &c.; the serum, on the contrary, is in a greater proportion in black blood, in anasarca, dropsy, scrofulous constitution, lymphatic temperament, feminine sex, infancy, old age, and consequently to excessive depletion. In fact, the blood must differ in its chemical composition from the period of the embryotic origin of man and animals to that of their complete development, and must be further modified by the various causes already enumerated. Thus we find it almost colourless, thin and serous in the embryo, red and more oxygenated in the infant, red and more fibrinous in the adult, and finally black and again more serous with old people.

It also displays the most remarkable characters in different morbid alterations, in typhus, yellow fever, cholera, scurvy, jaundice, during menstruation, diabetes, purpura, &c.

Dr. O'S. does not consider the morbid state of the blood the primary lesion in cholera; he very correctly regards it as the effect and not the cause; but in our opinion he mistakes when he supposes it produced by a deleterious agent acting through the medium of the vascular system. No one who has seen cholera can entertain the slightest doubt as to the nervous system being primarily affected, the prostration of the vital powers, the

spasms, and consequent deranged secretions, offer incontestible evidence, and these symptoms bear close analogy to those of common cholera or idiopathic tetanus, in which there has been no deleterious agent acting on the cerebro-spinal system.

The indications of treating cholera, according to Dr. O'S. are to restore the blood to its natural state of attenuation by diluent drinks, or by enemata; and he thinks the injection of water into the veins a feasible proposal. He suggests that the water should hold in solution a proper proportion of the saline matters which naturally exist in the blood.

A great deal has been published about the extraordinary success of saline medicines in cholera, especially at the Cold Bath Fields Prison; but we can assure our readers, that the majority of the cases which occurred in that institution were not of a malignant kind; and moreover they happened when the disease was fast disappearing in this metropolis, and assuming a milder type.

Other cases have subsequently been treated in the Cholera Hospital, Greville-street, by the saline medicines said to be so efficacious at Cold Bath Fields, but without success. There was one case however in this Hospital in which all other remedies failed, and recovery followed the use of these medicines. In making these statements, we do by no means wish to depreciate the use of saline medicines in cholera, but merely to shew that they are not infallible, or so very important as the writers, on whose opinions we comment, have imagined. We believe that saline medicines have great power on the blood, and have found them remove purpura; but though they may be equally efficacious in the mild stages of cholera, much more evidence is wanting to warrant the belief that they are capable of combatting the malignant form of that disease.

Since the preceding remarks were written, we observe the following important facts in the pages of our hebdomadal contemporaries, to which

they had been *exclusively* communicated by the Central Board of Health. We could not fairly expect that body, after our repeated exposure of its insignificance, would send us a copy; and it was merely doing an act of reciprocal kindness to those who, *per fas aut nefas*, puffed and trumpeted this same body. But the Board has no more claim to the following discovery, than to that of the longitude. Dr. Latta, of Leith, has transfused the following aqueous solution of saline matters into the veins in cholera, as proposed by Dr. O'Shaughnessy. \mathcal{R} mur. sodæ ζ ij—iij.; sodæ subcarb. \mathfrak{z} ij.; aq. O vj. This solution is to be at the temperature of 112° ; for at 100° it produces an extreme sense of cold with rigors, and at 115° it suddenly excites the heart, the countenance becomes flushed, and the patient complains of great weakness. The improvement in the pulse and countenance is almost simultaneous, and all the bad symptoms are removed. The remedy fails if used too sparingly, when organic disease exists, or when too late. In a successful case 330 ounces of the solution were injected in twelve hours. The woman recovered. The solution must never be injected more than once through the same orifice, and care must be taken not to inject air.

Dr. Lewins, of the Drummond-street Cholera Hospital, Edinburgh, relates three cases in which patients were recovering by this method, and Dr. Craigie of Leith another. Dr. Lewins reports another case, in which 284 ounces, upwards of 23lbs. were injected in which reaction took place, but it could not be stated when the letter was written, whether recovery was certain. Dr. O'Shaughnessy appends a note to these reports in the *Lancet*, in which he judiciously observes, that we should remember in these cases, the unknown remote cause and other agents may be in operation, though the saline injection produce reaction, and require to be remedied before a perfect cure can be

expected. He therefore recommends the injection of stimulant or astringent medicines in minute doses, such as carbonate of ammonia or quinine dissolved in water, and likewise weak decoctions or vegetable astringents; and these, according to Gaspard's experiments, can do no injury.

The saline injections were employed in the Greville-street Hospital, by Dr. Stevens, Mr. Whitmore, Mr. Marsden, Mr. Greville Jones, and others, but without success.

The profession are indebted to Drs. O'Shaughnessy, Clanny, and Stevens, and not to that stupid junto, the Central Board of Health, for the application of transfusion of saline medicines in cholera; and Dr. Blundell has much reason to be proud of his successful application of transfusion in uterine hæmorrhage, which is now beneficially extended to other formidable diseases.

A Manual of Percussion and Auscultation, composed from the French of Meriedec Laennec. By JAMES BIRCH SHARPE, M. R. C. S. Author of the Elements of Anatomy, designed for the use of Students. 12mo. pp. 118. One plate. London, 1832. Highley.

THIS little manual is a literal translation of the principles of Laennec's great work, and is one that will prove useful to students, and to all who wish to learn the use of the stethoscope. But as various authors of distinction, as Drs. Williams, Stokes, Hope, Corrigan, Townsend and others, have recently elucidated some doubtful points in the work of the great auscultator, the manual before us should have included these improvements. Had the translator done this, his production would be extremely valuable; but even in its present form it is worthy of attention. Dr. Townsend's chart, or tabular view of diseases of the lungs and heart, which folds into a pocket volume, and is also a literal translation of Laennec with additions, is decidedly preferable to

the simple version in this manual. Those who wish for the conclusions of the great Laennec, will find them accurately detailed in this little volume.

Practical Observations upon the Epidemic Cholera at Cork. By D. B. BULLEN, M.D. one of the Physicians to the North Cholera Hospital, and one of the Surgeons to the North Infirmary. Jackson, Cork. 1832. pp. 28.

A Short Treatise on the Cholera Morbus, or Indian Spasmodic Cholera; with suggestions for an improved Mode of Treatment, and for obviating Contagion. King and Ridings, Cork. Renshaw and Rush, London. 1832. pp. 84.

IF the cause, pathology, and treatment of cholera are not duly understood, it cannot be the fault of the members of the medical profession; for wherever this disease has appeared, it has been duly honoured by the press; its arrival in these countries has been as complete a windfall for the printers and publishers, as for a certain portion of our professional brethren. What with books and pamphlets of all kinds, sorts, and shapes, a very fair *cholera* library may be formed; the writers of these books complain very much of the hard work they have undergone, but heaven help their readers say we, they must be pretty considerably bored, as brother Jonathan would say, if they have read through one-twentieth of the works, good, bad, and indifferent, which have been published on this subject.

The gentlemen, the titles of whose works we have placed at the head of this article, are somewhat late in the field; their rivals have been so numerous, and the subject been dressed up in so many ways, as to render every thing written on it a mere repetition. We therefore feel bound in conscience to remind all intending to display their powers of writing on the cholera, of the old adage, *crambe bis cocta mor-*

tem fert, or in free English, *repetitions are odious*.

Dr. Bullen's little pamphlet shews him to be a man of judgment and observation; it is clearly written, and deserves praise. He appears to lean to the side of non-contagion, but he has not declared his opinion on the point. We are sorry we cannot also praise the next work on our list; it is apparently written *ad captandum vulgus*; the author, whoever he is, is one of the rankest and most furious contagionists we ever met with; he takes up the doctrine at a time, when every one else rejects it, and he reproduces all the old arguments in its favour, which have been refuted a thousand and one times.

A Treatise on the Injuries, the Diseases and the Distortions of the Spine, founded on an Essay, to which the Jacksonian Prize for 1826 was adjudged by the Royal College of Surgeons. By R. A. STAFFORD. Surgeon to the Saint Mary-le-Bone Infirmary, &c. 8vo. pp. 302. London, 1832, Longman and Co.

THE approval of the Royal College of Surgeons, of the essay on which this work is founded, is a powerful recommendation of the volume before us. The author is an original observer, and has obtained his information at the bedside of the patient, the examination of diseased parts after death, or from morbid preparations. He is no compiler, neither does he pretend to describe all the diseases of the brain, and spinal marrow. He first considers congenital diseases of the spine, then injuries, the diseases and distortions of the vertebræ, and lastly those of the medulla and its membranes.

This work being honoured by the approval of the Royal College of Surgeons, and being the result of extensive personal observation, possesses strong recommendations to a favourable reception by the profession.

THE

London Medical & Surgical Journal.

Saturday, June 16, 1832.

POISONING.

THE one great source of distraction by which the nation was so lately agitated, being now happily removed, ample opportunity is in future afforded for a deliberate and careful review of the laws which affect the social condition of this country. Nothing can be more necessary, nothing more useful, than such an examination, because, upon no important subject is there less real knowledge in the possession of the general mass of the people, than upon this. Take the medical profession for instance; state to a man of ordinary reading, that a surgeon may be punished for learning anatomy by the only possible way in which it can be acquired, and that the same person may be afterwards as severely punished for *not* having learned that science; put this, we say, to a man of average information, and he will not believe it. Neither would he credit the fact, that the most potent poisons in existence, from the three kingdoms of nature, may be sold as freely and as universally in a country like this, as cheese and table beer! One would think that our laws were made by persons who wanted to entrap others into crimes, instead of deterring from the commission of them. We open every avenue, we afford every facility, for the perpetration of the foulest offences—and we pounce upon the culprit only when

his virtue has been completely overcome by our encouragement. The facility of obtaining poison is quite sufficient to suggest its murderous employment. Those who have used it for such a purpose, would not, or could not, accomplish their object by other means. Poison acts internally: its effects are invisible, and the murderer believes that they will remain so, he flatters himself with the hope, like the Eastern bird, that what is hidden from his eyes cannot be seen by any body else. When a ruthless destroyer wishes to get rid of the object of his revenge, he does not practise those means for the *extinction* of life which are most likely to lead to his detection. He will not, if possible, leave upon the person of his victim those obvious traces of his violence, which would at once proclaim his crime. No; murderers who are not acting under the immediate impulse of passion, generally adopt that process of destruction, which, according to their false notions, is capable of baffling all inquiries into the nature of the particular cause of death.

Again; it is to our minds, at least, perfectly apparent that many of those who meditate the crime of murder, would rather abandon their horrid purpose at once, than have recourse to any of those brutal expedients for terminating existence, which are independent of poisons, and at which the timidity of the murderer would revolt. We have no doubt whatever that the instinctive dread of blood and bloody wounds, has often prevented the execution of a murderous in-

tent. There are men, we all know, who would kill, but would not butcher. A case may be easily imagined, wherein a party prefers the esteem of men to every other good in this world, and is resolved, at all hazards, to preserve his credit, rank, and reputation. He may go the length of compassing the life of a female for such purposes, yet this party may be so morally constituted, that he cannot undertake himself the shocking task of spilling innocent blood. It is by no means difficult to believe, that whilst he is irrevocably bent on her destruction, he should still recoil against the idea of plunging a dagger into that bosom where, shortly before, he had been so affectionately and confidingly received. Had no other means then been accessible to such a person but those which he dared not to employ, the victim would be saved, and a great crime prevented.

But the crime in reality is *not* prevented, the victim is *not* saved. The law opens a resource to the culprit : it enables him to procure, at a small expense, and without restriction or responsibility, any or the whole of the most expeditious of the poisons which he may fancy ; with this he may secretly, and without any sacrifice of his instinctive antipathies, or even of his convenience, accomplish all that the cruel knife, or the odious rope, could perform. Here then is murder without violence or blood : here no imploring eyes—no dishevelled tresses—no tear-bathed cheeks, make their resistless appeal to the

murderer's better nature. Oh ! no, the dreadful catastrophe is completed without his presence ; the wretched victim herself becomes the immediate, though unconscious, agent of her own destruction, and thus is monstrous crime deprived of half its terrors, and thus the human soul is brought to contemplate it with diminished horror. All that the nice and fastidious murderer has to do, therefore, is just to call at the next druggist's ; or, should such a token of refinement be absent in the district, then at the green grocer's, or, haply, the tailor's : let him there tell a trumpery tale about the infractions of rats or other vermin, and pay down a few pence,—he can have as much arsenic, on the moment, as would poison a regiment of stout soldiers.

Who, after all this, will presume to deny, that the facilities for obtaining the deadliest poisons act as an encouragement, or rather as an indirect bounty on their consumption in the dreadful way to which we have alluded ? Is there any advantage, national or individual, in the existence of these facilities ? None that we can divine. It is not necessary for any legitimate purpose whatsoever, with which we are acquainted, that poisons should be sold indiscriminately—that they should be vended generally, or by irresponsible persons, or that they may be procured at the will of any person. If these assertions be correct, and we are ready to prove them, ought a single month to pass before the effectual remedy is applied ?

DUTIES AND PRIVATIONS OF MEDICAL PRACTITIONERS.

THE medical and public journals have lately begun to discuss the subject of the remuneration of medical practitioners, and as might have been expected, differed in opinion. Two of the medical journals have advocated the cause of the profession, and two of the non-medical magazines have defended the notion that medical men are amply compensated for their labours. The last opinion is erroneous and absurd.

There is no class of society from which the public expect so much as from medical men, and without any immediate advantage to themselves. The public and legislature require that medical men should be well acquainted with their profession, and expend their time, talents, and fortune in acquiring sufficient knowledge to enable them to practise. This demand is satisfied, the legal testimonial is obtained, and the medical practitioner commences his career. He immediately discovers that he finds little, and most commonly no employment for some time, he pines for eight or ten years in obscurity, he is unable to support himself as a gentleman, he cannot procure bread, as emphatically remarked by the late Dr. Baillie, until he has not teeth to eat it. He looks around him, and observes his seniors in practice, but juniors in science and knowledge constantly engaged, and he has full time to reflect upon the labour and ex-

pense he has incurred in the acquirement of a vocation, which to him is profitless and useless. If he is a physician or surgeon, he is astonished at the number of years which roll over his head before his services are called for; and if he is a surgeon-apothecary, he is opposed by his neighbour the chemist, who without the slightest medical education, takes his place in society. Under such gloomy circumstances, which operate in general for ten or twelve years, there is no other member of society who has received a polite education, subjected to such a miserable condition. The young mechanic acquires a comfortable support, but the young medical practitioner, physician, surgeon, or apothecary, who is friendless, can scarcely obtain the commonest necessaries of life, unless he possesses a private income. He is compelled to assume a gravity and seriousness, unnatural at his period of life, he must appear as a gentleman without sufficient means, he must support an establishment, he must be always at home and give up all amusement and pleasure, he must sacrifice all the gaieties of life, and at all times and at all seasons be ready to answer each capricious call; but, alas! he must do all this, day after day, and year after year, before he receives an income sufficient for his support. He remains unknown and unemployed. He determines to improve his condition; he begins to prescribe for the poor, or he offers himself as a candidate for some hospital, dispensary, parish, &c. In his first half-dozen

attempts he fails of success, because he is opposed by older or more influential rivals, who have performed the noviciate in which he is engaged. But let us admit that he is appointed; he is now an officer under the command of a set of upstart, illiterate governors and subscribers, who harass, insult, and annoy him in a thousand ways, and who expect him, who does not receive a shilling for his services, to submit to their regulations and commands, as if he was one of the menials of their institution. He must be regular in his attendance, or his absence is recorded; he must sacrifice his private concerns to his public duties. If he is a dispensary physician or surgeon in London, he must sit for hours prescribing for the afflicted poor, and then go to visit others in the filthiest situations, and thus consume four hours daily, or his task-masters, the governors, or their committee, will sit in judgment upon him, with as much gravity as one of the judges would display during a trial for felony. In the majority of instances he is compelled to visit the sick at their own homes, when there is no necessity; and should he decline to do so, the tradesman subscriber lodges a formal complaint against him. Now he is expected to do all this unpleasant and laborious duty, without the slightest compensation; because, quoth the governors, it makes him known, and will ultimately serve him. Granted, but will it enable him to procure the commonest means of support? Will it enable him to pay his rent and

taxes, to maintain an establishment, to appear as a gentleman? Is it not well known, that physicians and surgeons have drudged in dispensaries for five and six years, and have not been called to a single respectable patient in consequence? So much for this mighty introduction which sanctions the unjust opinion of governors and subscribers, that medical men should not be remunerated for their services.

There was hitherto but one source of emolument in dispensaries, that derived from pupils; but the Apothecaries' Society have been base enough to join the ignorant governors in shutting it up, by refusing the certificates of the physicians, and requiring those of the hospital officers. A more barefaced injustice was never committed by this upstart corporation. Again; the College of Surgeons refuse to recognise the surgical practice of a dispensary, because the Examiners are all hospital surgeons, and personally interested in pocketing the exorbitant fees payable at these institutions. Dispensaries in London afford no source of emolument to the medical officers, the apothecary excepted; but in provincial districts, throughout the United Kingdom, some trifling salary is given. Parish surgeons are also miserably remunerated; in most places they are not paid a penny a visit. In the army or navy, the daily pay of assistant-surgeons is about the same as that of a journeyman mechanic; and that of a full surgeon is much less than the allowance of a captain, and totally

inadequate to enable him, if he has a family, to be a member of the mess. In private practice, the young physician, or surgeon, is seldom able to support himself by his profession for the first ten years. It is well known that Dr. Baillie was allowed £.100 a year by his uncle, Dr. Hunter, for ten years; the first surgeon in London was also unemployed for the like period; and the most eminent and wealthy surgeon in Dublin did not receive five pounds the first year of his practice. Such is the fate of the young physician and surgeon, as it is decreed by the *ingens turba stultorum*, that hydra-headed monster—the public.

ACADEMY OF MEDICINE.

17th of April, 1832.

AMONG the essays which have been transmitted to the society, there was one in German, by M. Hufeland, tending to prove cholera contagious in some instances, but not generally.

M. Dupuytren urged the academy to form a new commission to investigate the present epidemic, as the one then existing did not meet in sufficient numbers; he thought that such a commission was necessary to collect the principal facts relative to the treatment, and to compose a succinct essay, for the benefit of their provincial brethren, that they might not be taken unawares. He was also of opinion that they should ascertain the nature of the atmospheric causes, under the influence of which the cholera had broken out among them, and also the relation between the progress of the disease in Europe, and the atmospheric changes.

M. Double opposed the proposition of M. Dupuytren, he considered that

it was then the time to do and not to speak; he justified the first commission, inasmuch as they were too much occupied in practice to be able to attend. He considered that ascertaining the atmospheric variations would not lead to any useful result, as they had changed several times during the progress of the epidemic.

M. Marc urged that if a second commission were formed, some of the members should be chosen from the first.

M. Bouillaud supported the proposition of M. Dupuytren. He considered that the treatment should be based principally, not on the difference of temperament to which every physician attended, but on the real cause of the disease, which is always essentially the same. He also was of opinion that *emetics*, which had been so much lauded by M. Double, were injurious in the majority of cases.

M. Marc thought that *ipécacuanha* was very useful in many cases.

After some explanations and noise, the Academy passed to the order of the day; M. Dupuytren's proposition being carried.

M. Guéneau de Mussy divided cholera into sthenic and asthenic, according to the severity of the symptoms. He employs a mixed treatment. The carbon, praised by M. Biett, had proved successful in a case of obstinate diarrhoea.

M. Piorry considered the disease to be real asphyxia; all the cases which he had seen had breathed impure noxious air, and a free ventilation was sufficient to bring them round. These experiments had been performed at the Salpêtrière. He could not yet give the numerical result.

3rd May.

M. Double, after explaining the objects of the late and present commissions relative to the cholera, requested the members of the Academy would supply it with information regarding their personal experience of that disease.

M. Bancal of Bourdeaux, has written to the Academy, stating that he possessed an excellent antidote against the cholera, the *gin-seng*, a root at present very rarely to be met with.

MM. Mérat and Delens stated that there are various species of the *gin-seng* in China, the best having only an imaginary virtue.

M. Lassis detailed his experience in regard to the cholera. We believe that he considered opium and ipecacuanha preferable to all other therapeutic agents.

M. Bégin presented various pieces of bone, the cranium, ulna, radius, teeth, &c. taken from cholera patients, evidently stained black. He called the attention of the Academy to this singularity, without drawing any consequences from it against the doctrine of inflammation being the cause of cholera.

M. Rochoux thought this fact supported the belief in the primitive alteration of the blood.

M. Rullier had found this blackness in the bronchia, and in the intestines: at other times he has seen the intestines totally unchanged.

M. Piorry has observed an anormal development of the glands and follicles of Brunner and Peyer.

M. Guéneau de Mussy related the case of a child, in which during the asphyxial stage the radial artery was wounded, without effusion of blood.

—*Journal Hebdomadaire.*

ACADEMY OF SCIENCES,

April 30th, 1832.

An essay was read from M. Ozanam, physician to the Hotel-Dieu, Lyons, on the inter-crossing of the medullary fibres of the optic nerves on the sella tursica. M. Ozanam, in conducting his dissections, employed a magnifying glass, capable of presenting the nerves of eighteen inches circumference. He states that the nerves are separated by a very thin pro-

longation of the dura mater, which forms a sac full of white medullary matter, liquid like cream, and he considers that this intermediary fluid will explain the pathological phenomena which have caused the idea that the fibres of the nerves intercrossed. MM. Cuvier and Dumeril were appointed to report on this essay.

CAMBRIDGE UNION SOCIETY.

IS THE ANATOMICAL BILL EXPEDIENT?

The debate on Tuesday, May 22nd, was on the following subject—"Is it expedient that legal provision should be made for the supply of anatomical subjects? and is the Bill at present before Parliament calculated to effect that object?"

Proposed by Mr. Davidson, Christ's, opened by Mr. Johnston, Trinity.

Speakers in the affirmative,

Mr. Johnston, Trin. Coll.

Mr. Aldis,* Trin. Coll.

Speakers in the negative,

Hon. W. C. Henniker, St. John's.

Mr. C. R. Kennedy, Trin. Coll.

Mr. Fearon, St. John's.

Votes,

Affirmative 21.

Negative 8.

Majority 13.

DINNER AT THE BIRMINGHAM MEDICAL SCHOOL.

The anniversary dinner given by the students of the Birmingham School of Medicine to the Lecturers, was held on Monday last at Dees's Royal Hotel, and on no former occasion has there been so full an attendance. Dr. Edward Johnstone presided, supported by Sir E. Wilmot, Bart. Bransby Cooper, Esq. Drs. John and James Johnstone, Hastings, Conolly, and numerous other professional men from

* Only on the general question, not the particular Bill.

the adjacent districts. E. T. Cox, Esq. officiated as vice-president upon the occasion. During the evening the following honorary præmia were presented by the Examiners:—the Johnstonian prize of ten guineas, was awarded by Drs. Pearson, Eccles, and Wm. Sands Cox, Esq. to Mr. Wilkes; and the prize of five guineas, offered by E. T. Cox, Esq. by Sir A. Cooper, Bart. to Mr. Hammond; afterwards the following medals.—

Anatomy.—First silver medal, Mr. Walton; second silver medal, Mr. Vaux; B. Cooper, Esq. F.R.S. Examiner.

Materia Medica.—First silver medal, Mr. Willmott; second silver medal, Mr. Taylor; John Conolly, M.D. Examiner.

Chemistry.—First silver medal, Mr. Bolton; second silver medal, Mr. Beddoe; Richard Phillips, Esq. F.R.S. Examiner.

Midwifery.—First silver medal, Mr. Taylor; second silver medal, Mr. Willmott; — Bagnall, M.D. Edward Grainger, Esq. Examiners.

During the evening, Sir E. Wilmot, Bart. handsomely proposed a silver medal to be contended for by the students; the subject to be left to the lecturers. The president announced that the following noblemen and gentlemen had consented to form the committee for the present year:—

Earl of Bradford, Lord Lyttleton, Sir Gray Shipwith, Bart. Sir C. Throckmorton, Bart. Sir E. Wilmot, Bart. F. Lawley, Esq. James Taylor, Esq. Drs. E. and J. Johnstone, T. Smelt, Esq. T. W. Unett, Esq. Rich. Wood, Esq. Edward T. Cox, Esq.

Letters expressive of regret from inability to attend the dinner, had been received from Lord Lyttleton, and from the members of the county.

PARIS MEDICAL DINNER.

A splendid dinner was given in Paris on the 23rd of May, by the members of the Board of Health of Gros-Caillois (in the suburbs of Paris), to the medical youths who so nobly

devoted themselves to the treatment of the poor during the ravages of the Cholera. After the health of their majesties had been given, the Duc de Liancourt who presided, proposed a toast, “The young medical men, whose zeal and disinterestedness are above all praise.”

Hospital Reports.

GUY'S HOSPITAL.

Strangulated Hernia—Operation.

ON the 8th of May, 1832, Mary Hambleton, a laundress, aged 59, of a delicate constitution, and the mother of four children, was admitted into Guy's Hospital, under the care of Mr. Bransby Cooper, with symptoms of strangulated hernia. Upon examination, a tumor was found in the right inguinal region, in the usual situation of femoral hernia, to which, she says she has been subject for ten years. She describes that four times in this period, she has had symptoms of strangulation of the intestine, but that these symptoms had each time been relieved by the application of the taxis.

Upon the last two occasions, however, the whole contents of the hernial sac could not be returned into the abdomen, although the symptoms were relieved.

She now complains of great tenderness over the surface of the abdomen, and more particularly over the tumor; she has occasional sickness, no hiccough, and, with the exception of the pain over the tumor, and tenderness of the abdomen, attended with considerable constitutional irritability, no urgent symptoms have yet come on.

The hernia has been strangulated six hours; the taxis has been employed, but without effect. Eighteen ounces of blood were taken away, whilst in a warm bath, and an enema of castor oil was administered, and afterwards ice applied over the surface of the tumor.

May 9th, six o'clock A. M. She has passed a restless night; complains of nausea, with hiccough; pain continues over the whole surface of the abdomen, attended with a sense of distention. During the night castor oil enemata had been thrown up every three hours, all of which had returned, without any fecal matter. The bowels not being relieved, the hiccough and sickness increasing, as well as the pain of the abdomen. At eight o'clock A. M. Mr. B. Cooper was sent for, who immediately proceeded to the operation.

She describes that she has not passed any water since the strangulation commenced.

Mr. Cooper proceeded in the operation, according to the usual steps, until he had exposed the hernial sac, when he mentioned his intention, upon the present occasion, of deviating from the usual plan, in order, if possible, to return the intestine without opening the hernial sac. For this purpose he next divided Poupart's ligament, immediately over the neck of the sac, and then attempted to return the contents, but the stricture was not relieved; the edge of the knife was then directed inwards, and Gimbernat's ligament was in part divided, but the stricture still remained as firm as ever; it was therefore necessary to open the hernial sac, in order to relieve the stricture, which existed in the neck of the sac itself, entirely independent of either Poupart's or Gimbernat's ligament, proving decidedly the justness of Sir Astley Cooper's opinion, that the neck of the sac is the real seat of stricture in femoral hernia, which doctrine he has taught for upwards of twenty years.

Mr. Cooper, after the operation, mentioned that the reason of his anxiety to return the hernia without opening the hernial sac, was in consequence of a case which had lately occurred to Mr. Key; but it is to be remembered that although this operation may be successful, either in inguinal or umbilical hernia, the seat of stricture in femoral hernia appears

to preclude the possibility of its adoption.

The sac contained a considerable quantity of omentum adhering to it, behind which a very small fold of dark but healthy intestine was found, which was readily returned into the abdomen upon the division of the stricture.

The omentum was left within the sac, and the wound being dressed, the patient was carried to bed.

At four o'clock P. M. Bowels not relieved, no sickness or hiccough, nor any pain in the abdomen. The compound senna enema was administered.

May 10th. The bowels not relieved; complains of tenderness of the abdomen, which is much increased upon slight pressure; considerable anxiety of countenance; pulse 110; tongue white; twenty leeches ordered to be applied to the abdomen, and the bleeding to be encouraged by the poppy fomentations, and a pill of five grains of calomel, with one and a half of opium, to be taken immediately. In two hours after the pill, a draught, composed of a drachm of sulphate of magnesia and an ounce and a half of peppermint water, which was ordered to be repeated every two hours until the bowels were opened.

Three P. M. Less pain of the abdomen; the bowels not yet relieved, but feels as if they now are about to act.

Five P. M. Bowels relieved by copious evacuations, since which time she has continued free from every untoward symptom, excepting that she has all along been obliged to have her water drawn off, and the bowels have required the aid of aperient medicines.

On the 3rd of June she left the Hospital perfectly well, and mentioned that upon the application of her truss, she had recovered the power of passing her urine, which power she has since retained.

ST. THOMAS'S HOSPITAL.

TALIACOTIAN OPERATION.

GEORGE DOUGLAS, aged 36, of a full habit and good constitution, was admitted into the Hospital about a twelve-month ago, in consequence of ulceration of the face, extending to the nose, and causing sloughing of that organ, separating it from the gum, and producing considerable contraction of the mouth and part of the upper lip. The cause of his disease, in the first place, was owing to an accident which happened to him while on a voyage with Captain Parry to Hudson Bay, in the year 1827. He states, that on the 12th of July, while on this voyage, he fell from the fore yard across the cathead of the ship, and struck his face against the anchor. He was taken up nearly stunned, his face and nose being very much cut, and conveyed to the cabin, where the surgeon dressed the wounds; but the disease was so tedious that he was confined to the cabin until the middle of September. When at Fort York, Hudson Bay, the frost severely affected the injured parts, and caused ulceration to come on so violently, that the whole of his nose soon sloughed away, and all the remedies that the surgeon who was with him could suggest, would only relieve him for a short time, and the ulceration returned, although not so violent as before; and from this time it continued until the beginning of January, 1831, when he was admitted into the Hospital, and placed under the care of Mr. Green, who in the course of a month removed the ulceration, and the affected parts got quite well. From that time up to the present, his face has not only got well, but he has found his general health much better than he had experienced since the accident, but he has complained of being at times in very low spirits, owing to his misfortune; for it appears that during his expedition, he not only lost his nose, but likewise all his property. He has however regained his spirits in a

great measure, and has enjoyed good health, which he attributes partly to his having great hope in the operation which he is about to undergo, viz. for the formation of a new nose. Before the accident he had never felt the inconvenience of a day's constitutional illness, but had been laid up with wounds which he had received in an engagement with a Turkish frigate in the Mediterranean; he likewise was at the taking of New Orleans, where he received more wounds.

He was brought into the operating theatre on Friday the 1st instant, the portion of the forehead which was intended to be removed, having been first delineated with ink.

Mr. Travers, Mr. Key, Mr. B. Cooper, Mr. Callaway, with a large assemblage of the profession, and pupils were present.

Mr. Green commenced the operation by making two parallel incisions on the left side of the nostril, and removing the intermediate portion of the integuments, thus forming a kind of groove for the reception of the edge of the flap, when detached from the forehead. A similar incision was then formed on the right side, and another incision made in the upper lip.

An incision was then made on the left side of the forehead, of upwards of two inches in extent, and terminating at the root of the nose. The operator then went to the back of the patient, and made similar incisions on the right side, extending nearly to the centre of the line, defining the base of the triangle, and then prolonging the incision upwards about an half inch, to form a square flap, which was intended for the septum of the new nose. The left incision was carried to the same extent, so as to meet the right. He then dissected the whole of the portion, and secured one or two vessels. A piece of amadou was now applied to the wound for nearly half an hour, then the coagulated blood was wiped off the detached part with a sponge dipped in warm water, and this part was placed be-

tween two pieces of sponge previously immersed in tepid water.

The edges of the apex of the wound in the forehead were brought into apposition, and retained so by three plated pins, and the usual silk ligatures in the form of the twisted suture.

The detached integuments were twisted and fixed in the lateral grooves near the nostrils by means of fine silk, dossils of lint introduced into the new nostrils, and the lower edge of them adjusted to the upper lip. The patient soon complained of great pain in the forehead, in consequence of the presence of the lint, which induced Mr. Green to remove it, and at the same time he remarked, that if a fly settled upon the tip of the new nose, the patient would apply his hand to the forehead for its removal.

The operation lasted for two hours, and the patient bore it remarkably well.

In the evening the tip of the nose was cold, but on the following morning it was warm, and of a purplish hue.

The pain experienced during the operation he said was not much on dissecting the upper part of the flap, but below was very severe; he likewise described the transverse incision for the septum giving him much more pain than any of the rest.

Saturday, the day after the operation, the new nose appeared in a healthy state, and gave him but little pain until the evening, when the pain came on very severe, and lasted the whole night; the part now began to suppurate. Sunday, the pain was much abated, and continued pretty easy until Monday at noon, when the dressing was removed, and likewise the sutures. He now appeared to suffer a great deal, more especially when the lint was removed; this caused him so much pain that he nearly fainted, but bore it with the same fortitude he had hitherto so heroically displayed.

The dressing now consisted of similar pieces of adhesive plaster placed

in the same manner as before, and the part which could not be brought together on the upper part of the forehead was now covered with a piece of lint spread with simple cerate.

Tuesday.—This morning he is quite easy, the parts are all healthy, and that wound in the forehead which could not be brought together is almost filled up, and the only inconvenience which he now finds is from the pus running through the aperture between the lip and gum, and leading to the mouth. In every other respect his health continues good, and at present there is every prospect that he will be blessed once more with a very good substitute for his nose.

But still the poor fellow has to endure another operation before he will regain those good looks which he once possessed, that is to say, new lips, which will be necessary, should this operation succeed. This must, however, be deferred for some time, when we will notice the result.

MARY-LE-BONE INFIRMARY.

Case of Sporadic Cholera, treated successfully by saline injections into the veins—consecutive fever.

ANN FLETCHER, ætat, 45, a charwoman, admitted June 8, at 11 o'clock A.M. under Dr. Hope. She was seized with diarrhœa, vomiting, and cramps, at 3 A.M. She attributes her affection to partaking of lobster curry the night before.

Her previous health good; habits intemperate; symptoms—extremities cold and blue; pulse 120, barely perceptible; tongue brown, furred, moist, and cold; skin cold and blue; urine very scanty; diarrhœa urgent; complaints of pain over the abdomen, but more particularly at the epigastrium, increased on pressure, accompanied with nausea, vomiting, and cramps in the arms and legs.

Balm. aeris calid.

R mur. sodæ, ʒss.

Carb. sodæ, ʒj.

• Potass oxymur, gr. viij. ex aquâ statim.

R *Calom.* gr. viij.
P. opii. gr. $\frac{1}{2}$ ft. pil. s.
Pil. cal. c. opio o. h. s.
Sinapisma abd. et spinæ.

Half-past three. Pulse cannot be counted; skin very blue; countenance more collapsed.

Quarter to four. Pulse much improved after the injection of Oij. of the following solution into the circulation.

Sodæ mur. ʒij.
Sodæ carb. ʒij.
Aq. distill. Oij. ft. solutio.

She expressed herself stronger and much better in every respect, and said she could speak better; pulse 114, firm and regular; giddiness nearly gone, and sight improved.

Half-past four. The pulse flagging; two pints of the fluid were injected, when it again rose and became firm and regular.

Nine o'clock p. m. Purging continues with rice-water stools; skin cold and clammy; pulse scarcely perceptible; three pints of the saline mixture were injected into another vein between eight and nine o'clock. The pulse improved after it, and she felt herself better, and much inclined to sleep.

June 9th. Eight a. m. Has passed a quiet night, slept well, and is much better; countenance and colour natural; pulse 96, regular and steady; about three pints of the rice-water fluid were passed during the night from the bowels; passes urine freely, and has done so from the commencement of the attack.

R *Olei terebinth* ʒj.
Tinct. opii. ʒj.
Mucilag. ʒiv. ft. enema statim injiciend.
Inhaletur sp. rectif. vapor.
Sodæ carb. ʒj. o. h. s.

Eight p. m. Complains of nothing but heaviness and disposition to sleep.

10th. Still purged; some fæculent matter in the last stool.

11th. Had four bilious stools during the night; complains much of sickness; pain at the scrobiculus cordis shooting through to the back; has vomited a quantity of bilious matter.

Calom. gr. xv. statim.
Olei ricini, ʒss. post horas tres sumend.
Cont. mist. salin. app. vesicat epigastr.

12th. Has had nine bilious stools of a dark green colour; no sickness or pain in the abdomen; pulse 96, full and soft.

Mist. cardiac. ʒss. 6tis horis sumend.

There have been three sporadic cases of cholera admitted in this infirmary within the last ten days, of which this is the second. The first, an old man, who had suffered from diarrhoea for a fortnight before, fell a victim to the complaint; the third, who was attacked on Sunday, the 10th, and taken in under Dr. Sims, is now getting better. The same treatment was pursued in each case.

HOTEL DIEU.

Epilepsy — Death — Tubercle in the Cerebellum — Caries of the last dorsal, and the first three Lumbar Vertebrae.

Reported by H. MONTAULT, House Surgeon.

Simon, ætat 36, was brought to the Hotel-Dieu, 7th Octr. 1830, with all the symptoms of an epileptic fit, except foaming at the mouth and clinching the hands. These fits were formerly more frequent, and now occurred about once a month; he had very little cough at present, although he had been troubled with it for many years. The act of coughing caused pain at the back of the head. There were no other symptoms. He had the infusion of arnica, glysters, and good diet. A seton was made in the nape of the neck.

After a month's stay, not having had another fit, he thought himself improved. It was remarked that when he sat up, his face became blue, and he was threatened with suffocation. On examining him carefully, a tumour, caused by the jutting out of three or four spinous processes at the lower

parts of the dorsal region, was very evident, it had been coming on for six or seven years, but nothing had hitherto been done for it. There was no abscess, either in the loins or groins. Although unwilling to walk or stand, Simon was yet able to do either, consequently paraplegia had not commenced. Moxas were accordingly directed to be applied to the tumour, but he died suddenly in an epileptic fit, on the 23rd of November.

Necrotomic appearances. Externally

—A remarkable cicatrix was observable on the inside of the left foot; on cutting through which it was evident that the first metatarsal bone had been removed, and its place supplied by a cartilaginous substance. *Internally*—The tumour was formed by the spines of the last dorsal, and first three lumbar; on removing these with the posterior arches, the correspondent portion of the dura mater was found to be softened and disorganized; the spinal canal filled with good pus, the bodies of the vertebræ carious and tuberculated, the intervertebral substance unaltered; the pus was making its way anteriorly to the inguinal regions. In the chest the heart was healthy, the pleuræ adherent, and the left lung contained a large, cretaceous tubercle, and likewise a sac lined by a serous membrane. The brain was throughout very consistent; there were four or five ounces of yellowish serum in the ventricles, the connexions between were much dilated. On cutting open the cerebellum, in the mesian line, an infiltrated tubercle, the size of the thumb, was discovered, pressing on the fourth ventricle, which was diminished in size. The tubercle was not at all softened. The intestinal canal was healthy. This individual had always a great desire for women.

—*Journal Hebdomadaire.*

THE
SPIRIT OF MEDICAL LITERATURE.
No. 1.

Appearance of the Skin in Organic Disease.

THERE is something forcibly striking in the expression of the countenance and colour of the skin in most organic diseases. In *tubercular* disease of the lungs and elsewhere, the cornea becomes more shining, and the conjunctiva more pearly and blanched, with a softness and almost pensiveness of expression; the face grows sharp, and the skin delicate. In *scirrhus*, the expression is that of more or less solicitude; the skin has a sallow tint, like a *pale yellowish willow*. In *fungus*, the skin is of a dull muddled white, resembling *tallow* or *putty*.

DR. ARMSTRONG.

Discovery of the use of the Stethoscope.

In 1816, says Laennec, I was consulted by a young woman labouring under symptoms of diseased heart. Percussion, and the application of the hand, owing to her fatness, were of little avail; the application of the ear being inadmissible, owing to the age and sex of the patient. I happened to recollect a well known fact in acoustics, which I thought would be of service to me, viz. the augmented impression of sound when conveyed through certain solid bodies, as when we hear the scratch of a pin at one end of a piece of wood on applying our ear to the other. Immediately on this suggestion I rolled a quire of paper into a kind of cylinder, and applied one end of it to the region of the heart, and the other to my ear, and was not a little surprised to find that I could thereby hear the action of the heart most plainly.

Wounds of Nerves.

In the great majority of instances the mischief arising from venesection consists in inflammation of the vein

itself, or in inflammation of the integuments surrounding it, as in erysipelas, particularly phlegmonous erysipelas. Instances are extremely rare in which any ill consequences of venesection can be clearly traced to the injury of a nerve.—LAWRENCE.

Discovery of Iodine.

A soap manufacturer remarked that the residuum of his ley, when exhausted of the alkali for which he employed it, produced an erosion of his copper boiler, for which he could not account. He put this in the hands of a scientific chemist for analysis, and the result was the discovery of *iodine*; curiosity is thus excited, the origin of the new substance is traced to the sea plants, from whose ashes the principal ingredient of the soap is obtained, and ultimately to the sea water itself. It is there hunted through nature, discovered in salt mines and springs, and pursued into all bodies which have a marine origin; among the rest into sponge. A medical practitioner (Dr. Coindet of Geneva), then calls to mind a reported remedy for a most unsightly disorder, the *goitre*, frequent in mountainous countries, which was said originally to be cured by the ashes of burnt sponge. This led him to try iodine, and its specific power on this disease is now well known.—HERSCHELL. *Preliminary Review of Natural Philosophy.*

The Venereal Disease once attributed to air.

When syphilis first appeared, it was thought to be epidemical; and like other pestilential diseases, to be owing either to "the malignant influence of the stars," or an unwholesome disposition in the air. It was supposed for several years that the infection of syphilis was conveyed like the plague.

Carmichael on the Venereal Disease.

Ditto.

It is a curious fact, furnishing an example of the proneness of the human mind to run into opposite errors,

that soon after the appearance of the lues venerea in Europe, it was supposed to be communicable also by the breath: for whispering in the king's ear, knowing himself to be affected with venereal distempers, was made one of the articles of impeachment against Cardinal Wolsey.

DR. MACMICHAEL.

Inflammation.

I can state it as a positive fact, that if bleeding be properly had recourse to, and you can produce a certain degree of affection of the mouth (by calomel), you will hardly ever lose a patient with acute inflammation. Dr. Armstrong used to say that bleeding was the right arm and mercury the left arm of medicine.

DR. ELLIOTSON.

Cure for Ptyalism.

If some of the solution of the chloride of lime or soda, be mixed with six or eight of water, and the patient's mouth washed with this every hour, it will soon perform a cure.

Same.

The Death of Pope Adrian.

The death of Pope Adrian caused such joy at Rome, that the night of his decease they adorned the door of his chief physician's house with garlands, adding this inscription—"To the deliverer of his country."

Fractures of the Thigh.

For this inconvenience Hippocrates thus prescribes. In a fracture of the thigh, the extension ought to be great, the muscles being so strong, that notwithstanding the efforts of the bandages, their contraction is apt to shorten the limb. This is a deformity so deplorable that when there is reason to apprehend it, *I would advise the patient to suffer the other thigh to be broken also, in order to have them both of one length.*

Diarrhœa in Phthisis.

When the disorder of the mucous membrane of the bowels is a promi-

nent feature in phthisis, the purging may be often diminished, and the stools rendered natural in appearance, by giving the patient two grains of pulv. ipecac. united with four or five grains of confection of opium, three times a day.—DR. BRIGHT.

Calomel in large doses a Sedative.

Many practitioners suppose that if three or four grains of calomel will purge, twenty grains will purge more, and hence carry off its effects by the bowels; and that small doses will enter the system and produce the expected effect—salivation. The very reverse of this is the fact; small doses of calomel from two to three and four grains, will purge and keep up a considerable degree of irritation in the stomach and bowels, when *twenty grains* will not, but on the contrary, will allay irritation of both when it results from inflammation of their mucous surfaces. *Thus calomel in large doses acts as a sedative.*

ANNESLEY.

A Simile by Dr. Garth.

“Like a pert skulker, one physician plies,
And all his art, and all his skill he tries;
But two physicians, like a pair of oars,
Conduct you faster to the Stygian shores.”

DISPENSARY

BOTANY.

FROM the explanation which we gave in the last number of the Linnæan system, it will be seen that that system is founded on the principle that plants ought to be classed according to the stamens and styles which they possess. It has been likewise denominated the Sexual system. The *Natural system*, or as it is sometimes called the *system of Jussieu*, is founded on the principle that plants should be considered according to *all* their organs, forms, and peculiar properties. This plan has the advantage of leading us to the contemplation of those points in which any one plant resembles an-

other, and thus while we perceive a bond of union existing amongst the individuals that compose the great vegetable kingdom of nature, we can likewise distinguish the differences, great or small, which exist amongst them.

According to the system now generally adopted, the vegetable world is divided into two great portions—1. *Vasculares* (plants with spiral vessels), or *Cotyledoneæ* (plants furnished with seed leaves); plants which belong to this division, also have cellular tissue, woody fibre, spiral vessels, and true leaves. The flowers are generally distinct, and the embryo is enclosed within a seed-cover. This division comprehends all the classes of Linnæus, except the *Criptogamia*, the plants belonging to which form the second grand division of the natural system; the *Cellulares* (plants with cellular tissue only), or *Acotyledoneæ* (plants without cotyledons).

The *vasculares*, or *Cotyledoneæ*, are divided into two classes. 1. The *Dicotyledoneæ*, plants which have two cotyledons. These are also called *exogenæ*, on account of their stems increasing by layers added externally. 2. *Monocotyledoneæ* (plants having one cotyledon), is the name given to the second class, which also has the title *endogeneæ*, on account of their stems increasing by internal layers.

The second division, or *Acotyledoneæ*, is divided into two classes, the *Foliaceæ* and the *Aphyllæ*, which derive their character respectively from their leafy or leafless habit.

The subdivisions of these classes are too numerous to allow of their being explained within any reasonable time, in consequence of the limited space which we could afford weekly to such a subject. The course, however, which we shall pursue is this: we shall select those subdivisions which the student in medical botany is most interested in knowing, and these shall form the subject of the next article on botany.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I WAS very much surprised in reading your leading article, upon the unfortunate death of Capt. Burdett, to find you have glaringly departed from the principles you professed and practised, in the preceding numbers. You are pleased to say, that chemists are both ignorant, and unacquainted with their business; and you likewise call the attention of your readers, to the frequency of poisoning by chemists. Now as it happens that the greatest number of chemists shops are kept by surgeons, and apothecaries, your tirade is not altogether correct, and the charges of ignorance &c. fall upon these as well as chemists. If chemists are uneducated and ignorant of their business, how does it happen, that they are able, and obliged to correct the prescriptions of medical men, daily—the mistakes of which, if not corrected by (ignorant chemists as you term them) would cause the death of a great number of people. Trusting to your candour in inserting this note,

I remain,
Your obedient Servant.

A CONSTANT READER,

Great Surrey-street.

Friday, June 8th, 1832.

External application of Narcotics in Hemicrania, rheumatic and neuralgic Pains of the chest, back, and loins.—Dr. Graves has found the external use of narcotics highly beneficial in the diseases enumerated, and employed the following plaster to the head in a case of hemicrania, which defied all the ordinary remedies. The quantity of the narcotics must be diminished when the plaster is of smaller dimensions.

R. *Opii. pulv.* ʒij.

Camphoræ, ʒss.

Piçs Burgund.

Empl. Lithargyr. q. s. ut fiat emplastrum.

Mercurial Ointment in Erysipelas.—A great deal has lately been said concerning the successful employment of the ung. hydrargyri F. in Erysipelas, and its introduction has been generally attributed to the French practitioners, but this is evidently a mistake. The honour is due to the Americans, Dr. Dean having published in the *American Medical Recorder*, for July, 1820, an essay on which he dwells on the advantage derived from its use. He recommends it however only as an useful auxiliary measure. He directs it to be used in the following manner: it is to be freely rubbed into the parts occupied by the erysipelatous inflammation, and the limbs afterwards enveloped in fine linen cloths, upon which some of the ointment has been previously spread. This process is to be repeated twice or thrice a day. Its application has been found advantageous in this country, but we believe that in general the rubbing in is left out; we should think that friction would be liable to increase the inflammation. We have lately seen it relieve the severer symptoms of erysipelas.

Neuralgia of the Mamma, cured by Carbonate of Iron—Objections to large doses of this remedy, of quinine and other tonics.—In an obstinate case of neuralgia of the mamma, which defied all ordinary remedies, a cure was effected by carb. of iron. Dr. Graves considers that the immense doses of this substance, advised by Dr. Elliotson, are unnecessary, for he contends that when tonics, as the salts of iron, of arsenic, and quinine, fail to produce their effects in ordinary doses, other remedies are indicated. Repeated experience has convinced him that ten grains of sulphate of quinine a day, are sufficient in all cases, and his opinion is, that as a tonic, half a grain three times a day, and generally even smaller quantities, are sufficient. He also approves of the combination of this medicine with purgatives as advised by Dr. Epps and Mr. Chevalier.

Dublin Journ. of Med. Science,

Use of cold Affusion in Convulsions. Dr. Graves relates a case of convulsions occurring after scarlatina, in a boy aged nine years, and consequent to anasarca, which was cured by the plan proposed by Dr. Ireland of Dublin, by pouring a small stream of cold water from a kettle on the head. The cold dash is too violent in such cases. The stream should be small, and not from a height, to be renewed on the approach of another paroxysm. Dr. Graves states that in no case of determination of blood to the head, as in fever, apoplexy, paralysis, hydrocephalus, cerebral congestion, &c. ought we to apply leeches to the temples. These should be applied behind the ear, or along one side of the neck. Leeching the temples often aggravates cerebral congestion, a fact we have long maintained.

Collapse after Parturition—Restoration of the vital powers by cold aspersion.—Mr. Hayden relates a case in which almost fatal collapse occurred after delivery, and without a loss of blood sufficient to account for it. The pulse was scarcely perceptible several times, and diffusible stimuli failed to produce any effect. Cold aspersion of the face, by means of hearth brush dipped in water, frequently repeated, succeeded in rousing the vital powers, and was obliged to frequently employed.—*Dublin Journal of Medical and Chemical Science, May.*

LITERARY INTELLIGENCE.

WE understand the Messrs. Deighton, of Cambridge, are about to publish a peculiar *Revolving Table* for finding the terminations, tense, mood, voice, &c. of Greek verbs, from a design by Thomas Castle, Esq. F. L. S., of Trinity College, by which considerable labour will be saved in acquiring this important branch of the Greek language.

LIST OF BOOKS.

COUNTERACTION, viewed as a Means of Cure, with Remarks on the Uses of the Issue. By John Epps, M. D., Graduate of the University of Edinburgh, Lecturer on Materia Medica, Chemistry and Botany, at the Westminster Dispensary, &c. &c. Renshaw and Rush. 1832. pp. 69.

Catalogue of the Museum and Library

belonging to the Birmingham School of Medicine. 1832. pp. 62.

Remarks on the Importance of extending the means for the Cultivation of Medical Science in Birmingham, by one of the Lecturers of the School of Medicine. Barlow, Birmingham. 1831. pp. 22.

The Principles and Practice of Obstetric Medicine, in a series of systematic Dissertations on Midwifery, and on the Diseases of Women and Children; illustrated by numerous plates. By David D. Davis, M.D. M.R.S.L., Professor of Midwifery in the University of London, &c. Part viii.

NOTICES TO CORRESPONDENTS.

DELTA.—We are not at all desirous of trying transfusion in the case of the dying periodical to which he alludes; it would be time lost without avail; nothing can resuscitate it. Sir G. Tuthill's lectures will be acceptable. We have not the magazines alluded to.

The brevities would be a novel feature; we can only admit these and all other favours on the terms already mentioned.

Mr. Winslow.—The note was not available; circumstances do not allow us to deviate from our former determination.

Alpha.—We cannot insert strictures on reviews in contemporary journals.

Crito.—The article is too personal, and is libellous besides.

A Student of the London University.—The University should have a charter as well as the King's College; the Wellington Administration conferred one, and why not the Grey another? It is absurd to think that medical degrees cannot be conferred in London. The illustrious Lord Chancellor has not, nor could not forget the institution which he projected and founded.

A Poor Student.—It was harsh to refuse an admission ticket for a few weeks; no private lecturer would act in such a manner. The hospital teacher should not have forgotten that he was once poor himself.

Dublinensis.—There is much more consistency in the conduct of the Dublin Board than might be expected; but the learned secretary is too well versed in the history of epidemics to sanction absurd conclusions.

A Birmingham Student.—Our correspondent will observe in our present number, ample proof of the groundlessness of his accusation.

Medicus.—The laconic condemnation of Ingleby's and Tuson's works in another journal, has excited a dozen of our correspondents to send us recriminations; but the usage of periodicals is against their insertion.

We admit that wholesale censure, without assigning any cause, is unwarrantable and unjust.

Dr. Halma Grand's Styptic.—The case occurred last winter; the styptic did not fail; no ligatures were necessary.

A Medical Reformer.—Until influential and respectable practitioners come forward, no good can be expected.

London Medical and Surgical Journal.

No. 21.

SATURDAY, JUNE 23, 1832.

VOL. I.

SELECTIONS

FROM

THE SURGICAL LECTURES

Delivered in St. George's Hospital,

BY

B. C. BRODIE, Esq. F.R.S.

Fevers that are Symptomatic of other Diseases.

GENTLEMEN,

I SHALL not enter here into the history of fevers, for it is a subject that belongs exclusively to the medical lecturer; but I propose to point out to your notice the more important symptoms that occur. Intermittent fever is caused by marsh miasmata, and when thus caused, and independent of local disease, has nothing to do with surgery; but there is a fever very much like this that occurs, and is often symptomatic of some local disorder. A man, for instance, had a stricture of the urethra and ague. He consulted a medical man about the ague, but nothing cured him; by and bye the stricture became very troublesome, and he came to me for advice about it. I cured the stricture, and the ague left him. Intermittent fever is often accompanied with diseases of the urethra, and it is often present in phlegmonous abscesses; and the symptoms of symptomatic intermittent fever are very much like the symptoms of idiopathic ague, which arises from marsh miasma. In both you have the hot, the cold, and the sweating stages. In general, in the symptomatic ague, the paroxysms do not come on periodically, and hence the difference that exists between it and idiopathic ague; but there are other cases where the occurrence of the paroxysms are just the same. It mostly assumes the quotidian form. The paroxysms in these cases may occur at any time of the day, and may continue for a month, or a longer period. A person had fistula in ano,

another had abscesses burrowing in the nates, and they had intermittent fever.

Treatment. When the cold fit comes on, let the patient be put to bed, and endeavour to shorten the cold fit by giving the patient Dover's powder; put bottles of warm water to his legs, and an additional blanket on his bed. You may do something to prevent an expected fit by giving your patient a large dose of opium an hour before the paroxysm is expected. You are to cure the disease by which the fever is caused. In many cases this is easily done; if an abscess is the cause, open it; if a fistula in ano, enlarge the opening; but there are other cases which occasionally occur, where it is not so easy as when it arises from stricture of the urethra; when your patient will generally have a fit each time the bougie is introduced, and from the frequency of the paroxysms he becomes exhausted. But you must remember that the local disease is only one cause of the ague; there must be a particular state of the constitution that acts also. If you can do away with the local cause, so much the better; if not, do what you can to relieve the constitution. Give your patient *arsenic*. The same plan of treatment, indeed, that you would follow in idiopathic fever, will be of service in this symptomatic fever. A woman had an abscess in the neighbourhood of the rectum; she had a paroxysm of fever every afternoon at six o'clock. I gave her arsenic, and it relieved her. In general, however, the symptomatic fever that occurs in surgical disorders is not intermittent, but continued fever. Of that I shall now speak.

Continued Fevers.

These differ from the idiopathic form, in being dependent upon some local disease. There are two kinds of continued fevers; the first of these present many of the symptoms of inflammatory fever; there first comes on a little chilliness, which, in a very short time, is succeeded by a hot skin, a quick and hard pulse; the mouth dry, the tongue white and furred; the countenance flushed; the urine

high coloured and scanty, the bowels costive ; the patient desires liquids rather than solids, and these symptoms are always aggravated towards evening. The second kind presents a somewhat different train of symptoms, and resemble those of typhus ; there is pain in the head, a burning hot skin ; pulse wiry, small, and rapid ; tongue brown and furred, mouth clammy, great expression of anxiety of the countenance, and delirium. As the disease advances, the pulse becomes more rapid and feeble, and obliterated on the slightest pressure ; the patient becomes more restless, turning from side to side in his bed ; he gets into a low delirium ; the tongue, the mouth, and the sides of the lips, have a black crust over them. In other cases, there is great determination of blood to the head, sometimes to the fauces, producing great difficulty of swallowing, and sometimes congestion about the thorax, when there will be tension about the chest, and difficulty of breathing. Sometimes from local diseases you will find inflammation, and abscess in the substance of the lungs, or liver, or in the serous membranes, although the local disease may be far apart, as in the legs. There are many cases which induce, at first, the inflammatory fever, and after a time assume the typhoid type, just the same as in idiopathic fevers. At other times it may begin with the typhoid fever ; and when it does so occur, it is owing to the bodily powers of the patient being weakened. Much depends also on the part affected. If fever arises from making an incision in the tunica vaginalis testis for hydrocele, it would be of the inflammatory kind.

Treatment of the Inflammatory Fever.—You must first put a stop, if possible, to the local disease, and the means to effect this will also be good for the fever.—Consider if the patient will be benefitted by blood-letting; the quantity to be taken must depend upon circumstances, age, sex, &c. Always bleed when there is a determination of blood to any part away from the local disease. Give purging medicines ; the neutral salts, as they tend to increase the secretion of the alimentary canal. You may give the sp. æther. nit. to increase the secretion of the kidneys ; diaphoretics to increase the fluid from the exhalents of the skin.

Treatment of the Typhoid Fever.—You may have occasion to take blood from the part inflamed, therefore local blood-letting is sometimes not only admissible but necessary ; give the effervescing draughts ; keep the bowels gently open, do not purge, but give slight doses of calomel for this purpose ; give the patient cordials to support his strength. When the fever depends on sloughy or putrid matter pent up, let out the putrid matter, for unless you do this you will in vain endeavour to keep up the strength of the patient by internal remedies. There are some cases where the typhoid symptoms are so distinctly mark-

ed, that you cannot think of taking away blood locally, to relieve the local disease, without danger to the patient. In such a case, you are to attend to the symptomatic fever, and not to the local disease, because the fever is the most dangerous of the two, and may carry off the patient if not attended to. When the bodily powers are so much weakened, however extraordinary it may appear, to give stimulants when there is local inflammation, such remedies now will be requisite, and you must let the local disease take its own course ; the symptoms of continued fever begin when inflammation is present, and before suppuration begins.

Hectic Fever.

That fever which commonly depends upon an abscess in a hip-joint, or in an old fracture, is thus called ; it is caused by local irritation, and resembles the last stage of consumption. In this fever the least disturbance will increase the pulse, as the jarring of a door. It is known by a frequent but weak pulse ; tongue generally clean, moist, and whiter than natural, but sometimes a little furred ; the face is often flushed, and the patient often has a diarrhoea, and is in a state of debility, with profuse night sweats, which leave him in the morning. A child has disease of the hip-joint, hectic fever ensues ; he has diarrhoea, emaciation, and cough, and when he dies, it is found, on examining the body, that the lungs in general are diseased. That particular state which induces hectic fever, is often the means of setting up disease in some other part, especially in scrofula. If you are able to remove the exciting cause, the fever will, in all probability, go off ; for instance, if it is found requisite to amputate the diseased limb which caused the fever, we find that it leaves the patient ; but sometimes it is not found requisite to remove the limb ; then, in those cases, give bark, quinine, or the diluted mineral acids. At bedtime give Dover's powder ; and what is remarkable, we find that this powder does not increase the perspiration in hectic fever. The patient's diet should be nourishing ; give him wine and other cordials. Some persons say that hectic fever is the fever of suppuration ; they say it depends upon the absorption of pus ; but it often happens that hectic fever comes on after the pus is let out, and not whilst it is pent up, which would not be the case if this assertion were true.

CHOLERA.—St. Ignatius's bean has been tried successfully in some cases of cholera, at Calcutta. An alcoholic tincture is made of it, and it is administered in drops in a proper vehicle, with or without opium.—*M. Virey*.
[The essential, or alkaline, principle of St. Ignatius's bean, is the *strychnine*.—*Eds.*]

THE
ANATOMICAL EXERCITATIONS

OF
WILLIAM HARVEY, M.D.

(Continued from page 594.)

CHAPTER IV.

*What is the Motion of the Heart and Auricles
in the dissection of Animals?*

BESIDES these things concerning the motion of the heart, there are to be observed those that appertain to the auricles.

What Gaspar Bauhinus, lib. ij. c. 21, and John Riolanus, lib. viij. c. 1, the most learned men and the most skilful anatomists, observe and advise, that if in vivisection of any animal you studiously observe the motion of the heart, you see four motions, distinct in time and place, two of which are proper to the auricles, and two to the ventricles. With due deference to these men, there are four distinct motions, not only in time but in place. For both the auricles move simultaneously, as do also the ventricles, so that the four motions are distinct in place, but they occur at two different times only. There are, as if at the same time, two motions, one of the auricles, another of the ventricles; but they do not occur simultaneously, but the motion of the auricles precede, and that of the heart follows; and the motion is seen to commence from the auricles, and to proceed to the ventricles. When all things are more languid, the heart being in a dying state, as in fishes and cold-blooded animals, an interval of rest happens between these two motions, and the heart is seen as if weakened to answer the motion; sometimes more quickly, sometimes more slowly, and at length inclining to death, it ceases to answer its motion, as if it announces it slightly with its head, and moves so obscurely that it seems to afford a sign of motion to the pulsating auricle. Thus the heart ceases sooner to pulsate than the auricles, so that these are said to survive, and the left ventricle first of all parts ceases to pulsate; then its auricle, at length the right ventricle, and lastly, as Galen observes, all the rest ceasing and dying, the right auricle still pulsates, so that life seems to remain last in it; and while the heart is gradually dying, you may observe, after two or three pulsations of the auricle, the heart will, as if roused, respond, and very slowly and very feebly endeavour and make a pulsation.

But it is particularly to be observed, that after the heart has ceased to pulsate, the auricle still beating, the finger being placed over the ventricle, every pulsation is perceived in the ventricles, just in the same manner as we have already said that the pulsations of the ventricles were felt in the arteries, a distention being made by the impulse of the

blood; and at this time, the auricle only pulsating, if you cut away the apex of the heart with a scissors, you will see the blood flowing thence at every pulsation of the auricle; hence it appears how the blood goes into the ventricle, not by attraction or distention of the heart, but sent in by the pulsation of the auricles.

It is to be remarked, that all those which I call pulsations, both in the heart and auricles, are contractions, and you can plainly see that the auricles are primarily contracted, and afterwards the heart itself; for the auricles, when they move and pulsate, become whitish, more especially when they contain but little blood, for they are filled as the cellars and treasuries of the blood, by the compressive motion of the veins, and the distribution of the blood to its proper centre. Nay, further, it is evident, in the ends and extremities of them, that the whiteness arises solely from their contraction.

In fishes, and frogs, and the like, which have but one ventricle of the heart (and for an auricle they have a small vesicle, placed at the base of the heart, containing blood) you will see this vesicle first contracted and afterwards most obviously the contraction of the heart.

Nevertheless it was right to insert those things which were observed by me to be contrary to them. The heart of an eel, and some other fishes, and also other animals, is exempt, and pulsate without auricles. Nay, if you cut into pieces, you shall see each divided part, when separated from each other, contract and dilate, so that in such cases, after the motion of the auricle has ceased, the heart does pulsate and palpitate. But this, perhaps, is only proper to these more lively animals, whose radical moisture is more glutinous, or is fatter, or tougher; and not so easily to be dissolved. This also appears in the flesh of eels, which, after excoriation, evisceration, and cutting in pieces, still retains motion. An experiment being made on a dove, after the heart had ceased its motion, and that the auricles had also given over their motion for a short space, I made my finger wet with saliva, and being warm, detained it awhile on the heart. From this fomentation, as if it had received life and strength anew, the heart and its auricles began to be moved, and also to contract and relax itself, and did seem as if it were recalled back again from death.

But besides all these, I have often noticed that after the heart itself, and even its right auricle, had ceased to pulsate at the point of death, there manifestly remained in the blood itself, which was contained in the right auricle, an obscure motion, and inundation, and a kind of heating, that is to say, so long as it seemed to be possessed of any blood or spirit.

A thing of the like nature, in the first generation of animals, most evidently appears in

a hen's egg within seven days after her incubation. First of all, there is in it a drop of blood, which moves, as Aristotle likewise observed, which receiving increase, and the chicken being formed in part, the auricles of the heart being made, in whose perpetual pulsations which is life. Then afterwards, in a few days, the body commencing to receive its lineaments, there also is the body of the heart formed, but for some time it appears whitish and without blood, it neither pulsates nor moves as the rest of the body. I have also seen, in a human foetus, after three months, the heart formed, but whitish and without blood; nevertheless, in the auricles of which, there was a great store of blood, and of a crimson colour. So likewise in the egg, when the foetus was increased and formed; at the same time the heart was increased and possessed ventricles, which commenced to receive and then to transmit blood.

So that if a man will examine it minutely, he will not say that the heart is the first thing that lives and last that dies; but rather that the auricles (and in snakes, fishes, and such like animals, the part which is a substitute for the auricle) both lives before the heart and dies after it.

It is also uncertain whether or not the blood or spirit has, in itself, an obscure palpitation, which appeared to me to be retained after death; or whether we may say that with this palpitation life begins, seeing the sperm and prolific spirit of all living creatures goes from them with palpitation, as if itself were a living animal. So nature in death, making as it were a recapitulation (as it is well observed on the motion of animals) acts upon herself with a retrograde motion, from the beginning of her course to the end of it, and she returns to that whence she first issued, and as animal generation, from not being a living creature, is to be a living creature, as from a non-entity to be an entity, so by the same steps, corruption passes from an entity to a non-entity; whence it is, that that which in living animals is first made fails last, and that which is made last fails first. I have also observed, that really all animals have a heart, and not only, as Aristotle says, in the larger animals, and those who have blood, but also in the minor ones, and such as have no blood, as those which are crusted without or have shells, such as snails, crabfish, oysters, lobsters, prawns; and in many others, namely, in wasps and in hornets, and also in gnats (by a microscope made to discern the smallest of things) in the summit of that place which is called their tail, and I saw the heart pulsate, and exhibited it to others to see.

In those animals which have no blood, the heart pulsates slowly and with deliberate beats, just as it does in those animals which are dying, and contracts itself leisurely; this is easily discerned in snails, whose heart you

shall discover at the bottom of that orifice on the right side, which it seems to open and to shut on account of it being to take in air, and whence it expels its saliva, a section being made at the summit, near that part which is analogous to the liver.

But this must also be observed, that in winter, and colder seasons, some animals which have no blood (such, for instance, as the snail,) have no pulsation, but do rather seem to resemble the life of plants; as likewise the rest, which for that cause are called zoophyta or plant-animals.

And also in all animals where a heart is there are auricles, or something analogous to them; and wheresoever the heart is given two ventricles, there always are present two auricles, but not the contrary. But if you notice the conformation of the chick in the egg, first there is in it, as I said, only a vesicle or auricle, or pulsating with a drop of blood; afterwards increasing, the heart is perfected. So in some animals (not reaching to a further perfection) this pulsating vesicle, which is as big as a point at the commencement of life, such as in bees, wasps, snails, shrimps, crevices, &c.

There is here with us a little fish (which in English is called a shrimp, and in Low Dutch een garneel), usually caught in the sea and in the Thames, the whole body of which is quite transparent. This little fish I have often exhibited in water to some of my special friends, so that we could plainly discern the motion of the heart, while the exterior part of the body did not obstruct our view, as if we were looking through a window at the palpitation of the heart of this little animal.

I exhibited a hen's egg, after four or five days' incubation, to shew the first formation of the chicken, which resembled a little cloud. By immersing an egg, off which the shell was taken, into clear tepid water, in the midst of whose cloud there was a point of blood which did pulsate, but so little that, when it was contracted, it disappeared and vanished from our sight, and in its dilatation appeared again at the summit, red and small, as the point of a needle; inasmuch as that between the time it was seen and not seen, as it were betwixt being and not being, it did represent a palpitation, and the commencement of life.

CHAPTER V.

On the motion, action, and function of the Heart.

I confidently believe, then, that from these and the like observations it will be found that the motion of the heart is after this manner.

First, the auricle contracts itself, and in that contraction sends the blood with which it abounds, as the head-spring of the veins, and the cellar and cistern of the blood, into

the ventricle of the heart, which being full, the heart immediately erects itself, stretches all the nerves, contracts the ventricles, and makes a pulsation, by which pulsation it continually protrudes the blood, which is supplied by the auricles, into the arteries, from the right ventricle into the lungs; and that vessel which is called the pulmonary artery, but is truly, both in its order and office, and in all other things, an artery, is the left ventricle into the aorta, and through the arteries into the whole body.

These two motions, the one of the auricles, the other of the ventricles, are so done through a continued motion, as it were keeping a certain harmony and rhythm, so that they are both done at the same time, and only one motion is apparent, particularly in warm-blooded animals, whilst they are agitated with a sudden motion. Nor is this otherwise completed than when in machines one wheel moving another, they seem all to move at the same time. And in the lock of a musket, by the drawing of the trigger, the flint falls, strikes the steel, fires the powder, enters the touch-hole, and discharges; the balls pass out, pierce the mark, and all these motions appear on account of celerity, as in the twinkling of an eye, at the same time. So also in deglutition, the meat or drink is thrown into the fauces, the root of the tongue is elevated, and the mouth compressed, the larynx is shut close by its own muscles, and the epiglottis, the top of the windpipe, is elevated, and opened by its own muscles, just as a sack is raised to be filled, and open that it may receive. It thrusts down the food or drink, being received by the transverse muscles, and with the long muscles draws it down: yet notwithstanding that all these motions are made by several and different organs, whilst they are done in harmony and order, they seem to effect one motion and one action, which we call deglutition.

So it comes to pass clearly, in the motion and action of the heart, which is a kind of deglutition and transfusion of blood from the veins into the arteries. And if any one carefully observe this, and diligently remark the motion of the heart in the dissection of any living animal, he shall see not only that which I have said, that the heart erects itself, and makes one continued motion with its auricles, but also a kind of a motion and inclination laterally, and an obscure inclination in the course of the right ventricle, as slightly turning itself, and thus performing the work. And this may be distinguished when a horse drinks and swallows water; at every gulp the water is supped down into the belly, and sent into the ventricle, which makes a sort of a sound and pulsation, which it exhibits to those auscultating or wrenching of it; so it is that whilst some portion of the blood is drawn from the veins into the arteries, the motion of the heart may be heard, and the

pulsation will be heard to be made in the breast.

The motion of the heart, then, is after this manner, and the transfusion and propulsion of blood by extreme connecting arteries, is one action of the heart, so that the pulsation which we perceive is nothing else but an impulse of the blood made by the heart. But whether or not the heart adds any thing else to the blood besides the transposition, local motion, and distribution of it, either caloric, spirit, or perfection, we must inquire afterwards, and collect from other observations. Let this suffice for the present, that it is sufficiently proved that in the pulsation of the heart the blood is transfused, and drawn from the veins into the arteries through the ventricles of the heart, and so distributed to the whole body.

But all do in some manner grant this, and collect it from the fabric of the heart, and from the figure, position, and use of the valves. But if, as tumbling in an obscure place, they seem to be short-sighted, and make up various things, which are contrary and not consistent, and they pronounce very many things from conjecture, as has been clearly demonstrated before.

One thing seems to me to have been the chief cause of hesitation and error in this affair, the composition of the heart and lungs in man; for when they beheld the vena arteriosa (pulmonary artery) to obliterate itself in the lungs, and likewise beheld the arteria venosa (pulmonary vein) taking a similar course, whence it disappeared, it could not be forgot by them either how the right ventricle should distribute the blood into the body, or how the left ventricle should draw it from the vena cava. This you will find attested by Galen's words, in his book *De Plac. Hipp. et Plat.* 6, where he inveighs against Erasistratus concerning the origin and use of the veins, and also on the concoction of the blood. "You will answer," he says, "that it is so ordained that the blood be prepared in the liver, and thence carried into the heart, there it will afterwards receive its proper form and absolute perfection, which seems to appear not without perfect reason; for no perfect and great work is done suddenly at one attempt, and can acquire all its completion from one instrument; which, if it be so, shew us another vessel which draws out the blood absolutely perfect from the heart, and dispenses it as the arteries do their spirits, to the whole of the body." Behold a rational opinion, not relinquished and not approved of by Galen, because he did not see the course of the passage, he could not find a vessel, which from the heart would distribute blood to the whole body.

But if any are for Erasistratus, or in the defence of that opinion which is now ours (by Galen's own confession), and in all things else agreeable to reason, should have

traversed with his finger the great artery, distributing the blood from the heart to the whole body, I wonder what would that divine man, most ingenious and most learned, have answered. If he should say that the arteries distribute spirits and not blood, really this was sufficient to refute Erasistratus, who did imagine the spirits to be contained in the arteries only; but should in the mean time contradict himself, and should most shamefully deny that to be, which in one of his own books he arduously maintains to be true against Erasistratus; and had proved it by many and also strong arguments, and demonstrates it by experiments that blood is certainly naturally contained in the arteries and not spirit or air.

"But if that divine man (as he often does in the same place) should grant, that all the arteries of the body take their origin from the great artery, and this from the heart, and professing likewise that those three sigmoid valves, placed at the orifice of the aorta, prevents the regression of blood into the heart, and that nature had never ordained them for the best of our organs, unless they would exhibit for some great office." If, I say, the father of the physicians should permit all these things, and in his very words, as he does in his already cited book, I do not see how he could possibly deny that the great artery was that vessel, which did carry the blood after it had undergone its absolute perfection from the heart through the whole body. Or, perchance, he would still hesitate, (as all the rest from his time to this very day;) I say, on account of not seeing the structure of the heart with the lungs, he was ignorant of the ways by which the blood could be carried from the veins into the arteries. Which doubt does not a little perplex even the anatomists, when always in dissections they discover the arteria venosa (the pulmonary vein) and the left ventricle of the heart replete with thick, knotty, black blood; so that they are compelled to affirm that the blood penetrates through the septum of the heart from the right ventricle into the left.* But this way I have refuted already; therefore another way must be prepared and laid open, which, I believe, being found, there can be no more difficulty which can prevent any person from granting and confessing those things which I propounded before concerning the pulsation of the heart and arteries, and the transfusion of the blood from the veins into the arteries, and also the dispensation of the blood by the arteries into the whole body.

[* This is a literal translation of the original text, though at variance with the present doctrine.—M. R.]

AN ESSAY

ON THE

PROGRESS, USES, AND STUDY OF
CHEMISTRY.

THE forms in which bodies exist, and the combination of substances, as they compose the universe, depend on the chemical powers of attraction and repulsion. From the agencies of these forces, with caloric or heat, and galvanism, arise an extensive series of operations, which either form a part of the established order of nature, or which may be regulated by artificial arrangements. The investigation of these, and of the laws of the forces whence they originate, constitute the science of chemistry.

This fascinating and interesting science unfolds the most sublime views of the beauty and harmony of the universe; and develops a plan of such vast extent, that could only have been conceived by perfect wisdom and unbounded power.

Chemistry teaches us the intimate structure of all bodies, ascertains their component parts, determines the laws by which those parts are combined; and shews the effects which all simple and compound substances have on each other.

The objects which engage the attention of chemists, comprehend the whole of the substances which compose the terrestrial globe. This science embraces the consideration of all substances, from matter to space. Hence the utter impossibility of tracing its various applications within the limits of a short introductory discourse. A general sketch can only be presented, and this is necessary to convey a just idea of the nature and objects of chemistry.

The atmosphere, by its chemical powers, is a most important agent in the processes of nature. It serves, for example, to equalize the distribution of heat over the surface of the earth. The air expands, and becomes lighter from increase of temperature; for a current of it always ascends from any part of the earth's surface that is much exposed to the rays of the sun; it carries off the excess of heat which would otherwise accumulate, while its place is supplied by colder air, which is pressed in from every side. The warmer air is wafted to colder regions, and parts with the heat which it has received. A circulation is thus established, by which the extremes of heat and cold, that would otherwise have rendered the greater part of the globe uninhabitable, are prevented; while by these motions of the mass of air, its purity, as adapted to the support of animals, is more effectually preserved. It contains an immense quantity of caloric in a latent state, which is the source of the heat produced by the burning of combustible matter, and of that which animals gene-

rate, preserving them constantly warmer than the surrounding medium. Assisted by heat, it is capable of elevating a portion of water in vapour, which cooled in the higher regions, or in colder climates, descends in the form of dew, rain, hail, or snow; and by the declivity of the land, is conveyed over its surface, and returns to the ocean. Lastly, air is indispensable to the support of vegetables and animals. To plants it affords a considerable part of their nourishment. To animals it is still more necessary, its abstraction from them for a few minutes causing death. In both we shall see its agency is chemical.

Water is the medium of various important chemical changes in nature. It has considerable effect in equalizing temperature, partly by its motion, and partly by its changes of form; in passing to the state of ice it evolves heat, and absorbs it when it returns to that of water, and by both moderates the transition of seasons. In supporting animals and vegetables, it undergoes decomposition, and furnishes principles which contribute to the formation of their products.

Chemical influence is not less conspicuous in the animated world. The substances which are received into the animal and vegetable systems, and which are necessary for their support and growth, suffer decomposition, and their principles are combined in new modes and proportions in the vessels of the organic being, forming its substance and various products. The process may be modified by circumstances, it is still essentially chemical. During every stage of the process of vegetation, we shall find the whole phenomena depend on chemical actions. This is also obvious in the changes which take place in the animal system. In examining the process of digestion, we shall find that it is by a chemical agency the gastric fluid is able to act on the food. The function of respiration is one of the most important in the animal body. The air is decomposed in the lungs, a portion of it combines with the blood, rendering it pure, while a principle of an injurious nature is evolved and expired, during which process we discover the source of animal heat, or of that power by which animals are enabled to preserve themselves at a temperature superior to that of the medium around them.

Chemistry is to be also valued in its relation to the arts; for though they preceded this science, and originated from the necessities of man at an earlier period, still their principles are dependant on science.

Agriculture, the most important of the arts, is more directly connected with chemistry than with any other science. The chief object of it is vegetation, which is little else than a chemical process, consisting of a series of changes of composition, terminating in the formation of certain products. How essential are the aliments derived from vegetables to man and the inferior animals! In the treatment of the products of vegetation we find

chemical agency exemplified. Thus in bleaching we change the colour of the thread, and render it capable of being easily removed solely by a chemical process. Dyeing and printing are purely chemical operations; as also are fermentation and distillation. This science is the foundation of those arts that furnish us with saline substances—an order of bodies highly useful in the business of common life. Among these the most conspicuous are sugar in all its forms, the vegetable and mineral alkalies, known in commerce by the names of potash, pearl ash, and barilla, common salt, green and blue vitriol, alum, nitre or saltpetre, sugar of lead, borax, and many other substances. Starch, paper, indigo, leather, soap, glue; various metals, as iron, copper, zinc, tin, with their various combinations, as brass, pinchbeck, bell metal, gun metal, are all effected by chemical operations. Even the art of printing, the greatest of all human discoveries, owes much in its present unexampled perfection to the improvement of metal types. The production of glass, one of the most beautiful and useful gifts of art to man, is the result of a simple chemical combination; and from variations in the process, arise the arts of enamelling and imitating gems. And the processes employed in the fabrication of pottery and porcelain depend on similar combinations, regulated entirely by this science.

Few persons are ignorant of the benefits that have resulted to the manufactures of the United Kingdom, from the inventions of Messrs. Watt and Wedgewood; the former, by an intimate knowledge of the powers of latent heat, resulting from his own investigation, has perhaps brought the steam-engine to its acmé of perfection—one of the most perfect, powerful, and valuable instruments of human invention. The latter, by his chemical knowledge, has made rapid advances in the improvement of the art of manufacturing porcelain, and besides raising himself to great opulence and distinction, has created for his country a source of most profitable and extensive industry."

There are various other arts, subservient to the wants and luxuries of man, which are dependant on chemistry, but which need not be enumerated in this place. From the multiplicity of its objects, and the extent of its relations, there is no science, except that of medicine, which affords more interesting subjects of inquiry, or which contributes more to elevate and enlighten our views of nature, or which promises more immediate practical utility.

To the physician, chemistry is of the greatest advantage; it enables him to become acquainted with the composition and effects of the almost innumerable productions of the animal, vegetable, and mineral kingdoms, that are, or have been, employed in the treatment of diseases. There is scarcely a production of nature which has not, at some time or other, or under some form or circumstance,

been applied for the alleviation of the numberless infirmities incident to humanity. Unless the physician understand the actions of these various substances on each other, he would combine many of them in his prescriptions in an inert, useless, or dangerous form, and therefore often defeat his own intentions. It is a curious, but certain fact, that two substances may be combined by chemical agency and form a third, which will be quite different in its physical and medical properties from either of its components; or two very valuable medicinal substances may be combined and form a third, which will be inert and useless in the treatment of any disorder. How delightful and pleasing a reflexion for a physician to be able to obviate the effects, or neutralize the powers, of many of the most virulent poisons, when accidentally or deliberately applied for the destruction of human existence. Here he displays an instance of the noble and valuable importance of his profession, and may be fairly proud of that honourable and pre-eminent rank in society which has ever been allotted to him by universal suffrage. How true was the opinion of Cicero, "that in nothing did man approach so near the gods as in curing diseases," which, from the most remote period of antiquity, has been the general opinion. But in the case before us, the physician is the minister of that Almighty Providence who ever watches over man, and in the hour of distress rescues him from impending danger. When poison is taken, the physician endeavours to ascertain its nature, and immediately exhibits its antidote, which, by a chemical power, either renders it inert by a new combination or harmless, thus wresting the miserable and desponding sufferer from the grasp of death. For example, if a person swallow a solution of white or yellow arsenic, or opium, vomiting is to be first excited, if possible; and we next administer lime water, or carbonate of lime and water, which will combine with the poison, and form a harmless compound. Large draughts of emollient fluids, as sugared water, linseed tea, &c. are first given to produce vomiting; but fat, oil, vinegar, charcoal powder, alkaline sulphurets, and vegetable decoctions, are not to be relied on. Inflammation is to be combatted by general and local bleeding, and the other means usually employed, which need not be now detailed. Some persons affirm there is no *specific* for arsenic.

If sulphate of copper, or blue or Roman vitriol, its subacetate, or verdigris, or food cooked in foul copper vessels, or pickles made green by copper, an infamous yet frequent practice of the moderns, act as poisons, we give large draughts of milk and water to induce vomiting, and then whites of eggs stirred up with water, which should be drank copiously. Sugar was once considered a *specific* antidote; it is not so, but may be given in coffee with benefit.

We find that the deleterious effects of the super-acetate, or sugar of lead, red oxyd, or the carbonate of lead, or wines sweetened with lead, are best obviated by sulphate of magnesia, or Epsom salts, and sulphate of soda or Glauber salts, the sulphuric acid of which forms a chemical union with the lead, and an insoluble sulphate of lead is the product; this sulphate is not poisonous. Well-water, acidulated with sulphuric acid, will be the best substitute for the neutral salts just named.

If oxymuriate of mercury, or corrosive sublimate, nitric oxyd, or red precipitate, the red sulphuret, or vermilion, be taken into the stomach, we should administer emollient drinks, whites of eggs in water every two or three minutes, to neutralize the poison. Gluten of wheat flour, mixed with water, decomposes corrosive sublimate.

If the tartrate or muriate of antimony be taken, their antidotes are decoctions of astringent vegetables, as oak or willow bark, nutgalls, or strong tea, &c.

Nitrate of silver, or lunar caustic, is decomposed by muriate of soda in water.

Acids—sulphuric or oil of vitriol, nitric, or aqua-fortis, muriatic or spirits of salts, oxalic or acid of sugar, are sometimes taken by accident. If vitriolic acid be swallowed, an ounce of the carbonate of magnesia in a quart of water, should be given, in repeated doses. Pure water, or calcined magnesia, would induce a great distressing heat in the stomach; the acid combines with the magnesia, and forms Epsom salts. Soap, or chalk and water, may be given until magnesia can be procured. If the carbonates of potass and soda were given, there would be a great evolution of one of their ingredients, the carbonic acid, and an irritating sulphate would be produced. Carbonate of lime and water is the best antidote for oxalic acid, a salt much used for cleaning brasses, boot-tops, &c. in almost every family.

Prussic acid is a most violent poison; its effects are obviated by pure ammonia. Potash, soda, or barilla, have been sometimes taken, and vinegar, or other vegetable acids, would neutralize their effects by forming a chemical compound. The same antidote, if lime be given. If pure carbonate, or muriate of barytes, be taken, sulphuric acid is the best chemical agent, and hence sulphates of magnesia, or soda, are generally employed.

If opium be the poison, the best antidote is ammonia, dissolved in acetic acid or vinegar.

The knowledge of chemistry is highly necessary to the physician in another point of view, as when called on by the civil power to analyse and discover the nature of poisons, by instituting experiments on certain fluids, or other substances, which may be rejected by vomiting, or which may be found in the body of the deceased. How awful is the responsibility of the medical practitioner in

such cases, on which the characters, liberties, and lives of his fellow-subjects may depend. The annals of criminal and medical jurisprudence afford numerous melancholy examples of the ignorance of chemists and physicians, which proved fatal to innocent but suspected persons. Such is the importance of chemistry to the physician, and its value to society at large, in enabling them to derive the various remedies exhibited for the alleviation of human infirmity from the operations of the practical chemist, must be at once acknowledged. I have already shown, that all the products of the various arts which are subservient to the wants or luxuries of mankind, completely depend on this science. Well may the chemist exclaim,
"Quæ regio in terris, nostri non plena laboris."

History of Chemistry.

The word chemistry is said to be derived from the Arabic, to conceal, and it probably referred to the profound secrecy observed by the old alchemists in their operations, which had for their object the discovery of the transmutation of metals into gold, and the discovery of an elixir for the prolongation of life. Notwithstanding these extravagant pursuits, we are indebted to these visionaries for many valuable hints and important discoveries.

Chemistry is a science of modern origin, though we can discover, indeed, from the most remote antiquity, traces of various arts, the principles of which are chemical. They were the result of casual observation, or of experiments dictated by necessity, and they were long practised without any knowledge of the principles on which they were founded.

Metallurgy, or the art of extracting metals from their ores, was one of the first operations of the chemist. Egypt is considered the parent of chemistry, which formed no part of the Grecian philosophy. Some observations, however, on the chemical properties of bodies are to be found in the works of Theophrastus and Aristotle.

The delusions of alchemy, the pretended art of making gold and silver, gave rise to the experimental method of investigation, and thus laid the foundation of chemistry. Alchemy commenced before the close of the fourth century, and chemistry about the eighth. *Χημία* or *Χημεία*, of the Greeks, was practised so early as the third century; and Suidas tells us that it was an Egyptian art, and that Dioclesian ordered all the chemical books of these people to be burned, as they had rebelled against him. The Egyptian priests kept this science a secret, and hence it was called by Plutarch the secret science. It was also termed "the art of making metals,"—"the art of making gold and silver." From the Greek ecclesiastics it passed to the Arabians, and from them to the west of Europe. It was the natural philosophy of some, and the alchemy of others.

The alchemists affirmed, that the principles which compose gold exist in all metals, but contaminated with various other impurities, which could be removed by the lapis philosophorum, the philosopher's stone, which was to be made by alchemy. This secret, they alleged, was only given to a few favoured by God, and was to be kept secret, as great misfortunes would fall on those who should reveal it to others, without the clearest tokens of Divine authority. They concealed, as much as possible, their opinions, knowledge and pursuits. Hence they adopted a mystical and metaphysical style, employed peculiar figures and signs, that their writings should be understood by themselves only, and might be unintelligible to common readers. They published many books, long before the invention of printing, under real and often fictitious names of antient sages, which were readily bought up by the delusive hopes of becoming masters of the grand secret, and of suddenly rising by its assistance to affluence and distinction.

Geber and Avicenna were the first Arabian writers on chemistry. Alchemy flourished in the West of Europe from the eighth to the fifteenth century. Albertus Magnus, Arnoldus de Villa Neuva, Roger Bacon, Raymond Lully, and the two Isaacs of Holland, flourished in the thirteenth century.

Albertus Magnus was born in Germany, 1205, was afterwards bishop of Ratisbon, and preceptor of Thomas Aquinas in the University of Paris, who wrote several tracts on alchemy, not inferior, in point of mysticism, to the other works of that renowned divine. Albertus combined astrology and alchemy.

Roger Bacon, who was cotemporary with Albertus, was born in the county of Somerset, 1224. He studied at Oxford and Paris, and became a Cordelier friar. His works made such a noise that he was accused of magic, and thrown into prison by his brethren.

Arnold de Villa Neuva was born in Provence, 1240, and was Bacon's cotemporary. He was a physician, astrologer, and chemist, and asserted the world was to terminate in the year 1335. Raymond was cotemporary with Arnold.

The opinions of alchemists were obscure and enigmatical; they all boasted they were in possession of the philosopher's stone; they professed that they communicated the mode of making it, which was only intelligible to the favoured of heaven. In the fifteenth century various books were published against them, men of science pointed out the difficulty or impossibility of their art, men of learning said they were never understood, and finally most governments enacted laws against them as impostors.

The chemists, of whom we have hitherto spoken, confined their researches to the metals, and to the method of making gold, throwing out occasional hints of the progress of their art in medicine. Basil Valentine, a

German, born 1394, was the first medical chemist. This science was now applied to the discovery of an universal remedy for diseases, and was studied by all, and much improved by Paracelsus. This extraordinary man was born 1493, near Zurich, in Switzerland. In 1527, he was appointed to deliver lectures on chemistry at Basle, and was the first lecturer on the subject in Europe. He boasted he was in possession of the universal medicine which he called the elixir proprietatis, by which he could cure all diseases and prolong his own life; still he died at the age of 47.

Van Helmont, born 1577, was the great disciple of Paracelsus, and also boasted he knew the universal remedy, which he called *alkahest*; he died at 67. His successors were Agricola, Beguin, Glaser, Eskern, Glauber, Kunkel, Boyle, &c.

Beecher was the first to select all the chemical facts from alchymy, which he did in 1669, by publishing a work exclusively on the subject, entitled *Physica Subterranea*. He was born at Spire, in 1625, was an eminent physician and chemist, and died in London in 1682. Stahl, a German, was his disciple and commentator, and gave the science a degree of order and extension which raised it in some respects to a level with mechanical philosophy. He reduced the phenomena of chemistry under a certain number of heads. He said there was a certain substance called *phlogiston*, which formed a part of all combustible bodies, and that its separation constituted *fire*; whilst its various combinations produce most of the other phenomena of chemistry. His system was published in 1723; next came that of Boerhaave, a most accomplished philosopher, and the most celebrated physician, that ever flourished in Europe. His work was the best that ever appeared on the subject. Margraaf, of Berlin, wrote against Stahl; and next appeared Rouelle and Macquer in France; the first the founder of the chemistry of animal bodies, the last was the author of a chemical-dictionary in 1766, which was generally received through Europe. The reasoning employed in chemistry, even at this time, was loose and unsatisfactory, and the correction of all its faults was effected by the illustrious Swede, Bergman. He was professor of chemistry at Upsal, and introduced an order, a perspicuity, an exactness, which were hitherto unknown, and which greatly contributed to the subsequent rapid progress of the science.

Scheele was also a Swede, and the protégé of Bergman; his treatises are perfect models of chemical research, and display an ingenuity, knowledge, and address, which is altogether astonishing. How much indebted to him are the chief manufacturers of Manchester, for his discovery of oxygenated muriatic acid, that important article in bleaching. Bergman died in 1784, and Scheele in 1786. While those philosophers flourished in Sweden, Dr. Black, in Scotland, made his great discovery that lime-stone and mild alkalies are compounds

of lime and fixed alkalies with an aerial fluid, which he called *fixed air*, a discovery that led to the origin of pneumatic chemistry. The Hon. Mr. Cavendish investigated soon after the nature of fixed air and hydrogen gas; and in 1770, Dr. Priestley discovered a great variety of aerial fluids, and acquired a most splendid reputation. Lavoisier, of Paris, repeated and verified all the experiments of importance of the British and German chemists. He established a theory the reverse of Stahl, and for several years he had not a single convert to his opinions. Mr. Cavendish discovered the composition of water and nitric acid, and enabled him to explain his new doctrine in a satisfactory manner. Upon this Berthollet declared himself a convert in 1785, and his example was followed by Fourcroy and Morveau, and all the younger chemists of France.

Dr. Kirwan of Dublin, who had acquired great reputation by his chemical writings, published a defence of the doctrines of phlogiston. This was translated into French, and a refutation inserted at the end of each section, which induced him to embrace the Lavoisierian theory. His example was followed by Dr. Black, and all the British chemists. Lavoisier and his associates published a new nomenclature, which was adopted in every country in Europe. He fell a victim to the sanguinary infatuation of the French Revolution, though not connected with any party. Within a few years Britain has produced the most splendid additions to the science, by the brilliant discoveries of Sir Humphry Davy. From this very unexpected galvanic discoveries, the Lavoisierian theory has been almost entirely new modelled, if not in a great measure overthrown. Several important and necessary modifications have already taken place, and others of equal value will probably follow.

Dr. Woollaston was the first who succeeded in reducing platinum into ingots in a state of purity, and fit for every kind of use. It was employed for making vessels for chemical purposes, and it is to its introduction that we are to ascribe the present accuracy of chemical investigations. It has been gradually introduced into the sulphuric acid manufactories, as a substitute for glass retorts.

"His reflecting goniometer," says Dr. Thomson, in his History of Chemistry, "was a most valuable present to mineralogists, and it is by its means that crystallography has acquired the great degree of perfection which it has recently exhibited. He contrived a very simple apparatus for ascertaining the power of various bodies to refract light. His camera lucida furnished those who were ignorant of drawing with a convenient method of delineating natural objects. His periscopic glasses must have been found useful, for they sold rather extensively; and his sliding rule, for chemical equivalents, furnished a ready method for calculating the pro-

portions of one substance necessary to decompose a given weight of another."

His paper on urinary calculi added much to what had been previously known. He it was that ascertained the nature of the cystic oxides, and of the chalk-stones, which are found in the joints of gouty patients. He also proved the identity of galvanism and common electricity, and explained the causes of the phenomena arising from these. He also discovered two metals, palladium and rhodium. He made numerous other discoveries of minor importance.

"But it was Davy," says Dr Thomson, "that first completely elucidated the chemical decompositions produced by galvanic electricity—who first explained the laws by which these decompositions were regulated, and who employed galvanism as an instrument for decomposing various compounds, which had hitherto resisted all the efforts made by chemists to reduce them to their elements. These discoveries threw a blaze of light upon the obscurest parts of chemistry, and secured for the author of them an immortal reputation." This discovery enabled him to prove, that the bases of the alkalies, alkaline earths, earths proper, and metallic oxides, belong to one class only, and are all metallic oxides. His great discovery of chlorine must not be forgotten. Next to Sir H. Davy, the two chemists who have most advanced electro-chemistry are Gay Lussac and Thenard. Numerous other eminent chemists are now living, Thomson of Glasgow, Dalton, Faraday, Brande, Prout, Phillips, Barker, Henry, Turner, O'Shaughnessy, &c.

ON THE CIRCULATION OF THE VITAL FLUIDS.

By S. WOOLLER.

ON a former occasion the writer took a general and comprehensive view of the motions of the vital fluids. He observed, that the motions of the vital fluids must commence before the solids exist, and that the solids are originally a consequence and not the cause of the motions of the fluids. He observed, that heat, or cold air (by which he implied the repulsive principle) is the primal mover of the vital being; that it is capable, not only to begin the motions of the fluids before the formation of the vessels, but, even after these structures are completed, and the motions of their contained fluids are utterly suspended; it is even then capable of renewing them, and thus restoring an animal, which is physically dead, to motion, warmth, and life. Then the writer submitted the idea, that the same generic principle which can commence and renew the motions of the fluids, was probably the sole and efficient cause of their motion. He pointed to the free caloric, which alike

excites a lamp into flame and the animal fluids into motion, and remarked, that it is invariably borrowed from surrounding matter, or media, but that the disposition requisite to an independent power of generating, or being converted into heat, must be always existent in the body to be burnt, or the one to be vivified, or flame cannot be prolonged in the one case, nor life in the other. From hence the mind is led to consider, that as we are conscious that heat is essential to animal life, that as we possess the most plain and incontestible evidence that heat is constantly being generated both in animals and vegetables, and as we are certain that whenever heat is evolved, whether in a free or a gaseous form from any fluid matter, that there must necessarily be expansion of volume, are we not inevitably led to conclude, that in the animal and vegetable vessels, which are always full of fluids, and which assuredly somewhere in the course of circulation, almost exhaust the repulsive principles which we know they possess; do we not see a physical and absolute necessity for the motion of the fluids in the palpable existence of their own intrinsic power to produce it? Aliments, both fluid and solid, we take into the system which we know are prone to yield their attractive power to the law of repulsion, or, to use exemplifying terms, which we know contain fermentative and combustible principles. But if we analyze the secretions, and other effete refuse of the food, we shall find the repulsive properties considerably diminished; and what, we would ask, has become of them? A portion of the blood will go to supply the waste of the solids, and thence remain with its heat undigested for a time; but even the solids are ultimately absorbed and circulated, and at last expelled, materially deprived of their combustible or repulsive qualities. That heat, either latent or combined, must be evolved somewhere in the course of circulation, can scarcely admit of a reasonable doubt; and wherever that heat is evolved, there must be an expansion of volume. Is it not improbable, nay, almost impossible, that this process is completely effected in the lungs, and there the gaseous products entirely evolved? Is not the hypothesis more plausible, that the active fermentation begun in the blood in the lungs, continues when it has reached the heart, that the condition of the blood in the left ventricle of the heart is similar to that of any actively fermenting fluid, which is suddenly excluded from the atmospheric air, and exposed to the influence of surrounding heat? If the chemical or physical conditions are similar, they will tend to produce the like effects; and of these the most remarkable will be a tendency to increase of volume, or violent expansive force. The above comparison is not any the worse because it is homely; if an analogy of conditions exists, the theory involved is probably true. Analogy is the very index-finger of nature, and

he who would discover the path of truth on the wilds of theory, must steadily look the way it directs.

We know that the change of the blood in the lungs is analogous both to fermentation and combustion; it might be justly considered either a high degree of fermentation or a low kind of combustion, for it seems to occupy a medium place. It is the same process as both in principle, but different in degree from either. We know that the aliments of which the vital fluids are made, are the same as they which burn and ferment, and we observe that in all living beings these fluids are exposed to the same general conditions as fermenting and burning matters; they are obedient to the same general laws, and productive of many similar effects. Among these effects we have ample cause to look for a tendency to increase of volume in the principal vessels both of animals and vegetables. In what form or state the repulsive matters will be found existing in either the animal or plant, we are not prepared to predict. We have attributed the motion of the vital fluids to *heat*, because its repulsive power is generally associated with it, and being the most attenuated fluid of whose existence we are certain, it is considered the basis or source of every other. But as the free heat of the blood is not intense, and as the force of its motion is very considerable, we may expect to find that the repulsive power is developed in the animal heart in a gaseous form. And as we are aware that carbonic acid gas is abundantly generated during vinous fermentation, we may probably find that it is the expansion of this gas principally which causes the motion of the blood.

It has not been positively decided whether carbonic acid gas is really formed by the blood in the course of its circulation, or whether its formation is dependant on the immediate presence and contact of atmospheric air, but it is apparently poured in considerable quantity from the pores of the external surface, as well as from the cells of the lungs. Whether this gas can be generated and expanded in animal vessels as it is in a phial, flask, or other recipient container of fermenting fluid, seems a highly interesting inquiry. Yet why should the question be doubtful?

It is very generally known, that the change which the blood undergoes in the lungs is analogous to combustion; but it is not the general opinion that the energy of this combustion is implicitly regulated by the state of the atmosphere and other physical conditions, and that the power which an animal possesses of resisting extremes of heat and cold, is a physical, and not a peculiar vital power. We will endeavour to explain this power to resist extremes of temperature, for the purpose of discovering how closely allied the change of the blood in the lungs is to common combustion, and how rigidly the process is governed by the laws of physics.

We know that atmospheric air is generally essential to common combustion, and that the constituent portion of the air especially required is oxygen. We are aware that the higher the temperature of the air the less oxygen it contains in any given volume, and consequently the lower will be the combustion, and in this case the heat of the medium tends to preserve the heat of the animal, for less is absorbed by cold, and as the combustion for the same cause is lower the less animal heat is produced, and therefore heat of the blood remains the same. On the other hand, the colder the temperature of the atmospheric air, the more oxygen it contains in any given quantity, and hence the more intense the combustion in the lungs. But the heat that is gained by the quicker combustion is counteracted by a proportionate absorption by the cold, which is caused by the increased capacity of the air for heat, and therefore the heat of the blood is not increased. Thus we perceive that the same atmosphere which has tendency to heat an animal, has just an equal tendency to cool it, and *vice versâ*. The heat that is gained, or rather would be gained, by the solar heat in summer, is balanced by a proportionate deficit of oxygen, and consequently the lower the combustion in the lungs, and the less the quantity of the food required. On the contrary, the heat that is lost by the cold in winter is restored by the same cause that takes it away; for the more condensed or cold state of the air quickens the animal combustion, and the greater quantity or the better the quality of the food required, for food is the fuel of vital heat.

This appears to explain the general physical cause for the general uniformity of the animal temperature; yet it must not be forgotten that animals and vegetables are otherwise affected by external heat and cold. When cold is applied to the surface of the body, it is instantly in some degree self-counteracted; for it causes the pores of the vessels to contract, which prevents in part the absorption of heat, and on the contrary a heated atmosphere opens the pores, facilitates the circulation, and is thus partially self-counteracted by evaporation. But these modifying effects, though they are doubtless important and essential to the safety of life on sudden emergencies, yet only partly control without overruling the general influence of heat and cold; for more heat will be generated in the body on exposure to cold than to heat, in winter than in summer, and, consequently, a greater quantity or better quality of food is required. And we find that in proportion as the animal is exposed to heat, without it cease to evolve it from within, and in the ratio as it is rapidly absorbed by cold, it must be generated within from combustible aliments; and it is for this physical reason that cool and diluent drinks and vegetable food are so grateful and congenial to the inhabitants of all warm climates;

while in the northern regions a stronger, i. e. a more combustible diet, is absolutely requisite. Strong meats, vinous liquors, and even ardent spirits are in some measure the natural diet of all who are robust and exposed to cold. It is a natural and salutary instinct which leads to the use of them, an unnatural habit which betrays to their fatal abuse.

The opinion that animal heat is always generated from the nutritive matters on principles identical with combustion, is in all essential points consistent with the facts above stated. A common fire will burn better in winter than in summer, so will the animal combustion; a common fire must be fed by animal or vegetable remains, so must the animal combustion; a common fire requires atmospheric air, so does the animal combustion. Oxygen is not absolutely necessary in every case of combustion, neither has it yet been proved to be essential to every stage of the animal combustion.

Let us remark how the solid nutriment is gradually prepared for animal combustion. The first process of digestion of human food generally begins in the oven, or before the culinary fire; the second in the mouth; the third in the stomach; the fourth in the smaller intestines; the fifth in the lacteal absorbents; the sixth in the veins; the seventh in the lungs. But all these may be regarded as stages of one and the same process. Every change, excepting that in the lungs, is dependant on external heat, i. e. heat already free in, and not upon oxygen. Here we may observe the analogy subsisting between vital and physical effects. A common fire will not burn until it be kindled; common fermentation will not proceed without moderate heat; an ovum will not produce fœtus unless it be warm; neither would the elements of animals generate heat if they were not first exposed to its influence. Thus animal aliments borrow heat from the source they are preparing to feed, and the quantity, or rather the intensity of the heat, requisite to excite a body to fermentation or combustion, will generally indicate the quantity of oxygen required to support the process. The writer regards oxygen simply as a cold medicine, or recipient of heat, and not the peculiar *supporter* of combustion; for although pure oxygen, or a condensed atmospheric air, is generally requisite to intense combustion, either of them may *quench* a low degree of it. Oxygen undiluted, and unaccompanied by heat, will stop the process of fermentation (which is a low degree of combustion) as water will extinguish a fire. The fire-supporting virtue of oxygen and atmospheric air seem to depend on their capacity for heat, or, in plain phraseology, the negative virtue of coldness; and when they seem capable of absorbing and condensing the newly generated heat faster than is consistent with its production, they are not supporters of combustion, but rather preventers of it.

It would be foreign to the subject of physiology to enter into a profound inquiry on the nature of combustion, but the writer will add, in conclusion, that he can obtain a far clearer view of the nature of this process, without thinking of oxygen, hydrogen, or nitrogen; but when regarding the atmospheric air as a simple fluid, for such it probably is until it is decomposed. For every product of decomposition of a *homogeneous fluid*, or any body which is not a mere mixture, may be justly considered an entirely new production, and a matter which did not really exist in the decomposed matter, before the chemical action. When the *simple state* of all homogeneous bodies is made the foundation of chemical theory, combustion, and every other chemical decomposition, may possibly be explained, but *not till then*.

MR. COSTELLO'S LETTER

TO THE PRESIDENT OF THE ROYAL ACADEMY OF SCIENCES, POINTING OUT THE DANGER OF THE PERCUSSION INSTRUMENT FOR BREAKING STONE IN THE BLADDER.

To the President of the Royal Academy of Sciences of Paris.

SIR,—I have learned, from the Journals, the communications made to the Academy of Sciences, by M. Heurteloup, respecting a new means of curing stone. Without pronouncing an opinion on the value of the means thus proposed, I deem it proper to refute some of the incorrect assertions contained in the paper of this surgeon, and at the same time to submit a few remarks to the Academy.

In the cases of cure mentioned by this gentleman, two are mentioned as cases in which I had failed; this assertion is incorrect. Since my return to my own country, only three patients out of the great number who consulted me, did subsequently address themselves to my confrère. The first of these I visited in the country on my way to Edinburgh. After having made an exploration, it was settled, that he should go to London, in order to have lithotritry performed on him. On his arrival in town I was not yet returned. This patient placed himself under the care of my confrère who operated on him, and he died. This gentleman was Captain W. The second patient who left me, for M. Heurteloup, had paralysis

of the bladder, and a stone which held a fixed situation in that organ. This patient had been cut by Mr. Brodie three years before. I made an attempt with Civiale's instrument, and experienced no difficulty in seizing the stone between two of the branches of the forceps, and detaching from it considerable portions, which my confrère must have seen; but I was not able to dislodge the stone from its fixed situation, beneath the neck of the bladder, and which appeared to me to be that of the old cicatrix. This attempt was renewed with a similar result; each attempt occupied about five minutes.* I explained the difficulty to the patient, and proposed to dislodge it, by means of Hunter's two branched forceps. He was, however, intimidated by officious observations, and he placed himself under the care of M. Heurteloup, whom I had previously proposed to call in consultation. The indication of dislodging the stone, whose fixity in this case formed the sole obstacle to its comminution, was fulfilled by the means which I had previously proposed; this impediment once removed, of course the cure became easy. The patient was restored to health, at which I sincerely rejoice; and far from thinking that I had failed, he came afterwards to thank me for my attentions to him. It was admitted that my confrère and myself were of the same opinion as to the difficulty of this case, and the means of obviating it; so much for the imperfection of the means employed by me. I shall speak of the third case, in the sequel.

I wish I could refrain from the reflexions which I have to submit to the Academy, with regard to the *curved percuteur* and *hammer*. But the truth, as regards this instrument, is due to the community, and to M. Heurteloup himself, who once dis-

abused of his prejudice in favour of it, will apply his talents to weaken the impression against lithotritry, which an unfortunate trial of the *curved percuteur* has created in the public mind in this country. This truth is also due to the Academy itself, as the eulogy which it has bestowed on this instrument has caused no small sur-
prize.

I shall first of all observe that this instrument is not new. I saw, in 1826, an instrument similarly constructed in the possession of my countryman, Dr. Anthony L. Fisher, of the Rue Louis le Grand, at Paris, and it was not invented by Dr. Fisher, for it was a very old instrument. If Dr. Fisher be still in possession of it, I am persuaded he will feel a pleasure in submitting it to the Academy. Reason and experience agree in proving this instrument to be not only defective, but even dangerous. I do not deny that a stone may be fragmented, and that patients may be cured by it, all I contend for is this, that if eight calculous patients are stated to have been cured by it, the Academy ought not to be allowed to remain in ignorance of the danger, to which they have been exposed to obtain this benefit, when these sufferers had an alternative, in submitting to which they incurred no risk whatever.

In fulfilling this duty, I shall not suffer myself to be swayed by a recollection of the injustice, with which my labours have been alluded to in the Academy.

There are few surgeons in London who are not aware that Colonel Rankin was operated on for stone by the *curved percuteur*. The particulars of this operation were related to me by the celebrated surgeon who met the other medical gentlemen in consultation on this case. The particulars are as follow:—The instrument was introduced, and the operation proceeded satisfactorily for some time. It was now observed, from the emotion of the operator, that something was wrong; the instrument could not be withdrawn; a strong pair of for-

* In a recent number of the *Lancet*, it is stated, that I made three attempts of a quarter of an hour's duration each. I made but two of five minutes each.

ceps was asked for, and procured. An incision was now made in the perineum, and the blood flowed copiously from the divided artery of the bulb; the instrument had been bent in the bladder. A consultation was instantly held, and it was agreed to complete the cutting operation, and to withdraw the instrument, and the stone at the same time: this was done by Mr. Brodie. The Colonel had been a long time on the table; he lost a great deal of blood, and ultimately died.*

To this well-known and well-authenticated fact, it is scarce necessary to add anything. It was easy to foresee that the maximum of the power must have borne against the anterior curve, or branch of the instrument; the case above narrated demonstrates it. It is, however, important to add, that if I am well informed, this is not the only case in which a misfortune of a nearly similar nature occurred. Experience then has proved that the use of this instrument is not exempt from danger, since it is liable to be bent or broken by the violent shocks communicated to it by the hammer. This being established, I shall not undertake to prove that this instrument is almost in all cases unnecessary.

I now come to the third case, which fell under my confrère's care, after I had been previously consulted, and I shall give it at some length, because it may be fairly presumed, that M. Heurteloup's first idea of this instrument is closely connected with it. I should have felt it my duty to preserve silence on the subject, if I had not been called on to correct misrepresentations which have been made, not by any means now for the first

time, and if my statement was not calculated to throw light on the question of the modification of the lithotritic apparatus.

I freely acknowledge that formerly I was myself prepossessed in favour of new modifications, a prepossession which the encouragements granted by the Academy of Sciences had confirmed. In the hope of advancing the science on this point, I produced divers modifications, on the advantages of which I reckoned with a degree of confidence which caused me to undervalue the means already known. I subjected these modifications to the test of experience, and it was not until I became fully convinced of their inutility, and even of their danger, that I renounced the use of them. In narrating this fact, I disclaim all intention of depreciating the labours of a confrère, whose dexterity I acknowledge. I wish merely to express my conscientious opinion, that the most of those modifications have been imagined and executed, without even excepting my own, by authors who did not appreciate, to their just value, the means already in use. Let me also avow it; the hope of bringing back a labourer in the same good work to the conviction which I have myself obtained by experience, of the perils of employing complicated means, forms no small ingredient of the motive which induces me to speak out, on this occasion; such a conversion were well worth the trouble, for I am firmly persuaded, that it is only when he shall have renounced the use of complicated instruments that he will render to humanity and lithotomy, the services which both the one and the other are entitled to expect from his talents; but to the fact.

In the course of 1830, a patient labouring under stone in the bladder, accompanied by a gentleman whom I had previously relieved from this complaint, came to consult me. The patient being satisfied that his disease was stone, and being unwilling to be

* Having misunderstood the particulars of this operation, as they were first related to me, I take this opportunity of correcting my statement. The bent branches having been brought out through the wound in the perineum, were closed, and then withdrawn through the urethra. What remained of the cutting operation was performed by Mr. Brodie, who extracted the stone.

sounded, catheterism was not resorted to; it was merely agreed, that as soon as his harvest was got in (he was a farmer) he should come to town to undergo lithotripsy. His harvest was early, and he came to London while I was still absent in Edinburgh. He addressed himself in consequence to M. Heurteloup. A sitting took place, the result of which was satisfactory. It was, however, followed by irritation, which was subdued by bathing and leeching. A second sitting was attempted in the presence of a considerable number of medical men; but on this occasion it was found impossible to pass the straight instrument into the bladder. This was in the month of September. From this time to the month of February, 1831, a great number of attempts were made, but the instrument could no longer be made to penetrate into the bladder. Each attempt was followed with great irritation and infiltration of blood in the perineum and scrotum; the health of this patient, at first robust, was broken. He returned home; I was invited to see him. On my arrival at his house, I wished to be informed by his medical attendant, Mr. Nunn, of the motive which prompted his patient to send for me. He replied, "many unsuccessful attempts have been made to pass a straight instrument into the bladder; his former surgeon states that it is impossible, owing to an enlargement of the prostate gland; he is not disposed to submit to the cutting operation, and he now wishes to ascertain from you if the straight instrument cannot be passed." In the presence of Mr. Nunn, and several persons of the patient's family, I instantly passed a straight lithotrite into the bladder, and made Mr. Nunn feel that I was in contact with the stone!!!

The possibility of operating on this patient, by means of the straight instrument, being thus ascertained, I deemed it my duty to trace out a plan of treatment for the establishment of his general health. I should

observe, by the way, that I have not met one, out of the vast number of cases, (in many of which the prostate was enormously enlarged,) which have occurred to me, either during my connexion with Dr. Civiale, or since my return home, in which I have not found it, not only possible, but even easy to introduce a straight instrument. I infer from this, that such an occurrence must be rare indeed.

In the following week the patient received a letter from M. Heurteloup, from which I subjoin an extract, carefully refraining from commenting on the delicacy of such conduct in a professional point of view.

"He (M. Heurteloup) would also have been greatly obliged to you, sir, had you communicated to him sooner the decision you had come to; for since Mr. B—— and himself had decided that nothing could be done with the instruments then possessed by him, and that it was absolutely necessary to find other means of penetrating into your bladder, which would not admit of the introduction of straight instruments, he had expressly for you *proceeded to discover* other means more suitable. By not writing to him you have, therefore, allowed him to continue his labours, and he has now completely terminated an instrument; without which, experience in your case (experience of an instrument he had not yet used!!!) has told him, that you cannot be treated for your complaint without exposing yourself to danger."

Had I not proved the possibility of introducing the straight instrument a week before, this letter would have struck terror into the sufferer's mind. He, and his medical attendant, being however quite satisfied on this point, this extra professional piece of conduct was allowed to pass unheeded, though not uncommented on by them. Doubtless this opinion, as to the impossibility of passing the straight instrument, was given in perfect sincerity; far be it from me to dispute it. But most assuredly this case did

not require for its treatment any other instrument than that of M. Civiale; the proof of this is, that I operated on him three weeks after with a straight instrument, three lines and a quarter in diameter, and that the introduction of it was as usual, easy. On this occasion I completely reduced to powder the stone which my confrère had commenced an attack on, six months before. Henceforward the patient's sufferings, which up to this time had been most acute, ceased almost entirely. Another calculus, which the bladder contained, was also attacked. This was the only sitting I held on this patient. He died five weeks afterwards. Having observed that his sufferings in the bladder had almost wholly ceased after this sitting, we flattered ourselves with the hope of saving him. He even took a walk in his garden the day before his death; but this hope became daily less on observing the urine resume its bad quality, diminish in quantity, and the skin, pale and flabby, exhale a sweat of a highly urinous smell.

The autopsy was performed by the surgeons of the neighbourhood, who had the kindness to send me the particulars, as well as the pathological pieces themselves. The following are the chief points which the *post mortem* examination presented. The urethra and prostate were healthy, the latter somewhat enlarged. The urethra, at the neck of the bladder, admitted with facility the introduction of the end of the little finger; the bladder was thickened considerably at its sides and bottom; the rectal wall was natural; the mucous membrane was perfectly healthy throughout its entire extent; the anterior part of the *trigone* presented a slight incrustation of calcareous matter. The bladder contained a small flat calculus, of the size and shape of a peach-stone, which presented traces of the action of the drill, and weighed two and a half drams, six grains; the ureters were somewhat dilated. The right kidney was completely dis-

organized, and resembled a spleen divested of its capsule. The left kidney was three times its normal volume, and was filled with amorphous substance, resembling plaister; it contained a small quantity of dirty, purulent fluid; its consistence was soft; its colour a livid brown. The rest of the body offered nothing remarkable. This document is signed,

WM. NUNN, Surgeon.

EDWARD BARBER, Surgeon.

FREDERICK R. HITCH.

I shall offer no reflexion on this case; it would be superfluous. Mr. Stockbridge would have been relieved of the stone by Civiale's instrument, and his life would have been saved, had not his kidneys, from long continued irritation, been so profoundly disorganized.

I avail myself of this opportunity to communicate to the Academy the results which I have obtained by lithotripsy in England. I practice this operation with the instrument, and after the operative process of Civiale, for this reason, that it presents the advantages desired, and greater security than any other. I have operated here on nearly thirty patients with success. I have been consulted by a still greater number, on many of whom the state of the general health proscribed the operation; on others it was necessary to have recourse to an exploration, before a decision could be arrived at. On the whole I should say of this process that it is not applicable to all cases of stone in the bladder; but it possesses this great merit in my eyes, that in cases in which it is not applicable, the exploration made to ascertain this, does not aggravate the state of the patient. If it accomplishes no good, it does no harm.]

Can the same be affirmed of the new modifications? For my part experience has already resolved this question in the negative. It is to be feared that the profession in general may adopt against lithotripsy, such as it is practised with a simple apparatus, prejudices which are only well ground-

ed, when we consider the results obtained by the use of complicated instruments and methods. Of this a judgment may be formed from the following fact. Some time ago, I asked a London hospital surgeon, why he did not give lithotrity a trial; his answer was, "why should I? since I have seen it performed I entertain a better opinion of the cutting operation; I know already six patients who have been operated on by lithotrity, of whom five died, and I have seen nothing like that from the cutting operation;" my only reply was that I had not seen anything like it in the practice of M. Civiale.

I offer you many apologies Mr. President, for this long *exposé*, but I thought the importance of the subject required details. This question has never been for me a question of persons, for I acknowledge myself ready to receive, I care not from whom, any instrument or operative process which shall appear to me really to possess the characters of utility, simplicity, and safety, which this delicate operation requires.

I have the honour to be,
Sir, yours, &c.

WM. B. COSTELLO.

London, No. 7, Parliament-st.

March 10th, 1832.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

THE above letter was addressed to the President of the Royal Academy of Sciences of Paris, in the month of March last. It was written under the influence of the strong feeling of interest, which I entertain in every thing which affects the justly high repute, or the prosperous progress, of lithotrity. In this matter I have therefore taken the part which became me, namely, to submit to the Royal Academy of Sciences my reflexions on the instrument and system of percussion, as soon as they had been proposed. The memoir read before that learned body having been since

in part published in this country, I was induced, through the same motive, to forward to you for insertion in the next number of your Journal, my letter to the President of the Royal Academy.

The observations contained in that letter would not have been offered in their present form, had not the result of my labours been grossly misrepresented to the Academy. Under any circumstances I should have stated my objections to the proposed instrument, though if I had not been compelled to it, by the right of legitimate defence, I should have refrained from giving to my case any other shape than that which it would have assumed on rational and theoretical grounds.

I am but maintaining that ground which the true friends of the science would desire to stand on. I have never denied, that any ingenious cutler may produce, not merely one, but fifty different forms of the lithotritic apparatus. In proof of this, only see the vast numbers of forms in which they have been produced, and the variety of titles with which they have been decorated, in the short space of six or seven years. Every new form of these instruments, according to the inflated promises of its deviser, "was to be exempt from the defects of those that preceded it;" in short, it showed for the moment the *ne plus ultra* of surgical power in lithotrity; yet how have those promises been realized? Why, their very authors themselves, instead of being satisfied with the possession of this *ultimatum* of surgical power, have gone on, in what is called the career of discovery, till they have resuscitated an obsolete instrument, and proclaimed it as an important improvement. Thus do they go on, deceived themselves and deceiving others, and presenting to the world *discoveries*, which, as there is nothing novel in them, can only show forth the unsuspected wealth of which surgical science has been already long since possessed. Leaving the safe and sim-

ple instrument of Civiale, they have produced complicated and dangerous ones; and not satisfied, as of course they could not be, with the effect of these, they now return to ransack the antique surgical magazines for novelty. There can be no objection to this, for a man's amusement, but when the creations of his fancy are periodically thrown off, accompanied with a flourish of pompous and unrealized promises, this serious inconvenience is the result, that an apparent abundance of the implements begets hesitation in our choice of them; and experience cannot pronounce in favour of any one of them, for they have been all praised, each in its turn, *as important improvements, which realized the maximum of lithotritic perfection.*

Gentlemen, I seriously entertain a strong objection to frequent changes of instruments, and considerable distrust of the surgeon's ability, who is constantly veering about from one instrument to another, particularly when he already possesses one which may be used safely, as it has been used successfully, in upwards of 250 cases, amongst which will be found the names of some of the most distinguished surgeons of the day, Professor Baron Dubois; M. Boisseau, the celebrated Lisfranc of the Hôpital de la Pitié, and many others. Ask any lithotomist who uses the knife, why he does not try the gorget? He answers, because he is satisfied with the instrument he commonly uses. If I am asked, why I do not use the brise-pierre, the four branched instrument, the complex drills, &c. &c. my answer is because, independently of these instruments, being defective and dangerous in themselves, I am satisfied with an instrument in favour of which, experience has already declared itself so strongly. If in my letter, I have spoken with warmth, and introduced facts which otherwise I should never have noticed, it will be recollected, that this is not the first time I have been compelled to refute misrepresen-

tations of the results of my practice.

I have the honour to be,
Gentlemen, yours &c.

WM. B. COSTELLO.

7, Parliament St. Westminster,
June 14th, 1832.

OF THE

SCIENCE OF THE PULSE,

And its Modifications in Health and Disease.

By MICHAEL RYAN, M.D.

THE history of the pulse, or the sphygmie art, is of remote antiquity; it extends so far back as the mythological ages: traces of it are found in the ancient histories of India and China. The Indian physicians deduced their opinions on diseases from the pulse and countenance, while the ancient and modern Chinese entertain great veneration for the knowledge of the pulse, which they declare was the special gift of heaven to their empire. The Greeks considered it of great value in the practice of medicine. Hippocrates notices the pulse in several of his works, more especially in his observations on sleep, angina, premonitions, predications, and female diseases. He informs us that he examined the radial, temporal, and carotid arteries, as also the heart. This is denied by Sprengel in the *Dict. des Sciences Medicales*, though admitted by Haller and numerous other illustrious authors. As the father of medicine subverted the hypotheses and theories of his predecessors, Indians, Chinese, and Egyptians; all of whom are admitted to have practised the sphygmie art, it is highly improbable that he overlooked the subject.

Praxagoras succeeded Hippocrates, and described the pulse at great length. He made so many subdivisions of it, that Galen termed them a collection of enigmas. He contended that no alteration of the vital powers, or no disease could occur, without an ine-

quality in the pulse. Herophilus was his successor, A. C. 324, and united the chimerical notions of the Indian physicians with those of his predecessors. He compared the variations of the arterial pulsations to musical cadences.

His contemporary, Erasistratus, was of opinion that the arteries and left ventricle of the heart contained air, and that this caused the pulse. Bacchius of Tanagra maintained that pulsation could be felt in the veins as well as in the arteries and heart.

Zeno of Laodicea held that the heart was a continuation of the arteries, and that the pulse was produced by the contractions and dilatations of these alone.

Philaethes, on the contrary, referred the pulse to the contractions and dilatations of the heart and arteries.

Heraclides of Eritria regarded it as produced by the vital and animal energy, which induced contraction of the heart and arteries.

Asclepiades flourished about half a century before this era, and ascribed the pulse to the aereous influence with the contraction of the heart and arteries.

Celsus alludes to it in his third book, but places little reliance upon it.

Rufus, his contemporary, ascribed it to the *pneuma* or air in the arteries, as also did Acatinus of Sparta, who said there was no pulse in health.

Archigines was his successor, and first gave a useful change of the sphygmie doctrine of his predecessors. He described many kinds of arterial pulsation, as the high, strong, full, quick, frequent, regular, irregular, vehement, compressed, and irritated. Corsius followed him, and revived the pneumatic doctrine. He said that the pulse was rapid in fever, in consequence of the air in the arteries being rarefied. In the second century appeared Galen, who rescued the science of the pulse from all the absurdities of his predecessors. He published an elaborate work on the subject, entitled "*De pulsibus ad tirones, de pulsum differentiis, de cognoscendis pulsibus,*

de causis pulsum, de præsagitione ex pulsibus, et compedium pulsum." His theory of the cause of the pulse was erroneous, for he supposed that the vital power contracted the heart, but the *pneuma* or air caused the oscillations of the arteries. There is a full account of his description of the pulse in the work of Prosper Alpinus, translated by Dr. James, and entitled *The Presages of Life and Death in Diseases*, and also in Leclerc's *History of Medicine*. He held that all the differences of the pulses were comprehended under ten kinds, which will be described hereafter.

Ætius appeared in the fifth century, and published a work *De Notis ex Pulsibus*, in which he maintained that it was by the pulse the physician could distinguish the nature of different diseases, and prognosticate the event of organic lesions.

About this time the barbarous Arabians destroyed the Alexandrian library, and prevented the cultivation of all the sciences. From this period to the revival of literature in the fifteenth century, but few eminent physicians flourished, and these were Alexander Trallianus, Arian of Alexandria, Mesue, Serapion, Rhazes, and Avicenna, all of whom were Arabians. I have not been able to refer to their remarks, and therefore am at a loss to state their opinions on the pulse. Dr. Rucco, however, informs us in his learned and excellent work on the pulse, to which I am much indebted for many facts in this narration, that the Arabian physicians reduced the sphygmie art to a few trifling subtleties, and predicated future events by it. It is also necessary to state that Actuarius of Constantinople flourished in the thirteenth century, and revived the doctrines of Galen. He made numerous original observations, and concluded that the pulse enabled the physician to distinguish all changes in the human body. This work was entitled *Quod post Puls; urinar; aptant ad pravid.*

The next writer on this subject was Salio, who investigated this branch of

medicine with great zeal, and stated that it enabled him to predict the event of disease, and in many cases to prevent its access. He was succeeded by Prosper Alpinus, whose work already named was a compilation from the labours of all his predecessors. It appeared in the sixteenth century, and was so strongly recommended by Boerhaave, that he strongly advised its publication. It was also translated into English by Dr. James. Paul Zacchius succeeded him, and maintained that the pulse was the basis of medical science *De Pulsibus*. He was followed by his countryman Sthurtius of Padua, who published a treatise under the title *De Arte Sphygmica*. He stated that he acquired great fame and riches by taking the pulse for his guide in the treatment of various diseases. The illustrious and indefatigable Haller passes a high encomium upon his production.

Baillou succeeded him, and concluded that all branches of medicine were of little utility unless the sphygmical art was included; as by it the diagnosis, prognosis, and treatment of diseases could be correctly determined. He advised that the pulse should be studied at the different periods of life, and the results applied to practical medicine. *Epid. et Ephem*, lib. 2.

About this time our illustrious countryman published his splendid discovery of the motion of the heart and circulation of the blood, and laid a solid basis for medical science. From this time the study of the pulse became indispensable, and has never ceased to interest the professors of medicine. Some writers made it the exclusive object of inquiry, and these will be particularly noticed in this paper.

Bellini, professor of anatomy at Pisa, contributed to improve the value of the pulse; and Schellammer was enthusiastic in his observations, for he said he had found it an unerring guide. He observed—"me pulsus per integros duodecim annos medicinam facientem nunquam adhuc

fefellit, sed sæpe tantum peperit mihi animi certitudinem, ut diem ipsamque horam mortis, ei soli confusus, sim ausus pradicere, et in illo quidem vix unquam temere, in hoc vero non raro etiam eventum expectationi geminum habuerim." *Disq. Epist.*

All eminent physicians now included the study of the pulse, both in their lectures and writings. Boerhaave treated of it in his *Institutions of Medicine*, De Hean paid great attention to it, and Hoffman published a work, *De Rationali Pulsuum Examine*. In 1781 the best work on the pulse was published by Solano, a Spanish physician; this was entitled *Lapis Lydius Apollinis*. It was the result of great investigation, and contained many discoveries, which he said enabled him to form the most accurate predictions of diseases. His production was rendered much more valuable by Nihell, an Irish physician, who appended to it notes, illustrations and additions. Nortwiek of Amsterdam translated it into Latin in 1746, and added numerous notes; while a French version was published in Paris in 1748, by Lavirotte of Montpellier. The study of this subject now became general in the universities.

In 1758 Bordeau still farther improved the treatise of Solano, by publishing his work, *Recherches sur le Pouls par rapport aux Crises*, in which he introduced many minute subdivisions, which cannot be observed in practice. He was succeeded by Michel, whose work bore the same title.

About this time Cox and Fleming of London pursued the subject with zeal, and the former published a tract on the intermittent critical pulse, in which he points out the necessity of purgatives. Numerous other essayists have since appeared, but I must confine myself to sphygmical monographers only; the names of essayists will appear as we proceed. But here I cannot but allude to Menuret, whose article on the

pulse in the French Encyclopædia is decidedly one of the best extant. In it we find the doctrines of the Chinese, Hierophilus, Galen, &c. The essay by Haller, in his great work on Physiology, well deserves honourable mention.

In 1767 Foquet published his *Essai sur le Pouls par rapport aux Affections des principaux Organes*; in which he reviewed the opinions of Solano, Nihell, Bordeau, and Menuret, and defined the characteristics which distinguish, what he terms, organic pulses, or those that indicate organic diseases.

Towards the termination of the last century Cirillo of Naples published his work *De Pulsibus*, in which he divested the subject of all ambiguous hypotheses, and drew his conclusions from observations and facts only. Two other monographic writers have lately published their works on the pulse, and these are Dr. Parry and Dr. Rucco. On their productions it is unnecessary to offer an opinion, their great value is universally acknowledged.

In the preceding sketch of the history of sphygmica, I have studiously avoided introducing the names of many illustrious and able physicians who have incidentally noticed the subject; for example, Senac, Swieten, Pitcairn, Bryan Robinson, Cullen, Monro, Corvisart, Buchoz, Claye, Sachero, Laennec, Heberden, Falconer, M'Donnell; and among the recent writers, Jackson of Philadelphia, Corrigan, Hart, Haycraft, Burne, Graves, and Hope. The merits of each of these writers will be impartially estimated in my future remarks upon this subject.

Pulse, pulsus, pulsatio, sphygmus, pouls, French—*das puls*, Ger., is the beating of the heart, the movement and dilatation of the arteries, considered in their relation to health and disease. The knowledge of the natural pulse, and of its modifications in different diseases, was denominated the *sphygmica art, ars sphygmica*.

The natural pulsé of the arteries.—

In the normal or natural state the pulse of an adult is easily felt, is soft, equal, regular, neither too frequent nor too slow; it beats from 65 to 70, or 75 times in a minute, the pulsations being at an equal distance from each other. It is sometimes slower in health, and does not exceed 35, 40, or 50. Napoleon's pulse was 54. Dr. Graves mentions a lady in whom it was 35; and Dr. Jackson of Philadelphia another, in whom it could not be felt in any part of the body. In this last instance it was natural before a severe attack of rheumatism. Dr. Thomas Williams of Guilford-street, Russell-square, stated at the London Medical Society in 1831, that one of the city aldermen, who enjoyed perfect health, had a pulse not exceeding 15 beats in a minute. The pulse may be intermittent or irregular in health, and become regular during disease, and after convalescence assume its former condition. In new-born infants it beats, according to Heberden, from 120 to 140 in a minute; about the second year 100; and at puberty about 80. In adults it is full, more developed than in infancy and adolescence; in woman it is 10 or 12 beats more than in man; in old age it is weaker, larger, harder, and from 50 to 60. Dr. Falconer was, I think, mistaken, when he maintained that the pulse in old age was more frequent than in infants. It is more frequent and strong in those of sanguine or bilious temperament; it is feeble and rare in lymphatic and melancholic subjects. It is more frequent after conception, and very much accelerated during parturition. It is said to differ according to stature, but the modifications from this cause have not been accurately determined. As the human body is influenced by the diurnal revolution, the motion of the arteries has been found to vary at different hours of the day. Bryan Robinson having accurately observed the variations of arterial motion, constructed a table, by which it appears that the pulse is slower in the morn-

ing than at any other hour of the day; that after mid-day it is more frequent; then it becomes slower from two to eight o'clock, but beats 8 or 10 times more than in the morning; it is less frequent during sleep; and about two hours after midnight it rises and falls until seven or eight o'clock. He concludes that these variations of the pulse coincide with those of the barometer and thermometer. It is also well known to physicians, that the pulse is more frequent in the evening in all diseases accompanied by fever. It varies according to the posture of the body, a fact first noticed by Dr. Macdonnell of Belfast, subsequently by Dr. Thomson, in his work on Inflammation, by Dr. Stroud, and recently by Dr. Graves in the Dublin Hospital Reports, 1830, v. 5.

The last named able physician states that he ascertained by numerous experiments, that in healthy persons the pulse in erect posture is more frequent than in the horizontal, by from 6 to 15 beats in the minute, and if the pulse is but 60, the difference is generally not more than six or eight, but if it is raised to 90 or 100 by moderate exercise, the difference may be 20 or 30. The body being placed with the head down and the feet up, no further retardation of the pulse was effected, neither on the other hand, was it accelerated beyond the number observed in the horizontal position. He verified this fact in the presence of Drs. Jacob and Apjohn, and Mr. Harris. The strength of the pulse was diminished in the inverted position, and it became irregular from the greater weight of the blood pressing back on the aortic valves, and thus opposing its egress from the left ventricle. He states that the pulse is stronger in the horizontal than in the erect position, consequently its maximum of strength and minimum of frequency are attained together. This he thinks satisfactorily accounts for the relief obtained by placing patients in the horizontal posture to prevent

syncope. In all diseases, except in six cases of hypertrophy with dilatation of the heart, he has found a difference between the frequency of the pulse in the erect, sitting, and horizontal positions. He sums up his deductions in the following words:—

“ I shall now give the results of a great number of observations, made both in hospital and in private practice, upon this effect of change of posture on the frequency of pulse in other diseases,

“ 1st. That the greatest difference occurs in patients labouring under fever, or in a debilitated state in consequence of fever, or any other cause. It may amount to 30, 40, or even 50, between the horizontal and erect postures.

“ 2dly. That this difference decreases after the first quarter of an hour in most cases, but always remains considerable, as long as the same position is observed.

“ 3dly. That in persons not much debilitated the difference is much less than that stated above, and often does not amount to more than 10.

“ 4thly. That when the patient lies down, the pulse rapidly falls to its former standard.

“ 5thly. That in some the increase in frequency is greater between the horizontal and sitting posture, than between the latter and the erect; while in others the contrary takes place, so that generally the frequency in the sitting posture may be taken as a *mean*.

“ 6thly. In persons convalescent from fever or acute diseases, I find it is extremely useful to the physician to ascertain the comparative frequency of the pulse in the horizontal and in the erect position. The greater the difference, the greater is the debility of the patient, *and consequently the more guarded must his medical attendant be in allowing him to sit up for any length of time*, particularly if the pulse on his lying down does not resume its usual degree of frequency.”

It has been long observed, that mental emotions, exercise, ingestion

of aliment solid or fluid, exertion of the respiratory organs, as in speaking, laughing, coughing, hiccuping, groaning, or crying, states of sleep and waking, intellectual exertion, compression or diseases of the arteries, barometric changes, storms, cold, heat, the diurnal revolution, and the seasons vary the pulse; the influences of all these causes are not accurately determined, but many of them have been lately investigated in consequence of a prize offered by the faculty of Tübingen, in 1823, for the best essay on the influence of these causes on the pulse. M. G. H. Nick, was the successful candidate, and has since published his essay, *Beobachtungen ueber die Bedingungen unter denen die Häufigkeit des Pulses im gesunden Zustand verändert Wird*, 1826. Observations on the conditions which change the frequency of the pulse in a state of health. He commenced his researches in 1823, and published his work in 1826, with additional observations. From this production the succeeding statements are condensed.

M. Nick has examined the pulsations in a great number of individuals, but as it was difficult for him to find people who were willing to renounce their accustomed habits for one or more days, which would be necessary for him to pursue his researches, he has only been able to make observations of any length, upon himself. He has also examined the pulse of some animals.

The observations of M. Nick refer principally to the following conditions; namely, the effect produced during the different hours of the day, after taking food, drink, the states of sleep and watchfulness, of study, walking, position of the body, excretions, the smoking tobacco, modifications caused by respiration, compression of the arteries, in the barometrical state, storms, cold, heat, and the seasons. Before repeating the result he has obtained upon the examination of each of these conditions, the author gives us an account of his observations upon

the isochronism of the arterial pulsations and those of the heart; he has found that the pulsations of the carotids and their branches are isochronous with those of the heart. The radial artery presents an interval scarcely perceptible; between the pulsations of the crural and the heart, the pause is more distinct, but it is not equivalent to half a second; in the evening these pauses are more distinct than in the morning.

In the morning the pulse is the most frequent, when there has not been any particular influence upon the individual, during the night, or preceding day. In the course of the day, the pulsations diminish a little. The greater part of the alterations, that authors have observed, as dependant upon diurnal revolution, are only the result of accidental circumstances, such as repose, occupation, position of the body, &c. In fine, pulsation only diminishes its frequency when the individual remains in bed during the day, and in such manner avoids the habitual excitements. The pulse does not undergo any change at noon, as Cullen and M. Double have asserted. M. Nick believes it is a little harder in the morning than in the evening.

It is therefore said, by this writer, that the pulse is but feebly modified by the pure and simple diurnal revolution. A circumstance which acts on the pulsation in a more powerful manner is the taking of food, and more especially the temperature at which it is taken. Thus a piece of bread, taken in bed, for breakfast, only increases the pulsation two or three beats; cold meat does not increase it more, it even diminishes it when taken with vinegar. Curdled milk produces the same effect as vinegar; the ingestion of it not only does not increase the pulsation, but sometimes diminishes it, when the person is warm. Fruits may be numbered among those foods whose use does not increase the arterial pulsations; but when the food is in the least warm, it increases the pulsations five

or six beats in the minute: eight or twelve spoonfuls of soup produce the same effect; but when taken very hot, augment the pulsations nine or ten in a minute. The soup which is taken at dinner produces this effect; the beef that is taken after the soup merely keeps up, without increasing, this acceleration; vegetables taken after the beef, produce a trifling augmentation. In general, it may be said, that the pulsation is increased about twelve beats in a minute, by an ordinary dinner. This increase is kept up for the two first hours after dinner; it may be continued for three hours, if the food that has been taken, be at all of difficult digestion; it then gradually diminishes, and in five hours after dinner the pulsations are the same as they were before. If a person take but one meal a day, and that be at noon, the pulsations will be found at ten or eleven in the evening to be about three less, than they were on his rising in the morning. The frequency of pulsation diminishes sooner in a person that goes to bed as soon as he has taken dinner, than in one that remains up; but, if, on the contrary, a person remains standing, or walks after dinner, the number of pulsations is increased; but the ordinary duration of the fever dependant on digestion is not prolonged by the effect of this last circumstance.

When cold food is taken, the increase of pulsation does not commence till about a quarter or half an hour after the repast, and this increase is always in a direct ratio in its force and duration, to the quantity and consistence of the food taken. During an ordinary cold dinner, the pulsation becomes a little more frequent, but the acceleration that is produced by a hot dinner, and which happens while taking the meal itself, does not take place for half an hour or an hour after the cold repast.

When a glass of water, or light wine, is taken immediately after the beef, the pulse loses a portion of the rapidity it gained after the soup; the

diminution is from one to four beats in a minute, and continues for a quarter or half an hour; after which the pulse regains the frequency it had previous to the taking the drink. This instantaneous relaxation of the pulse does not continue so long if it be good wine that is drank; in this case the duration is not more than seven minutes and a half; then the pulse becomes more frequent by one or two beats than it would if no liquor had been taken at dinner. Fresh water taken in small quantities, at different times, exercises scarcely any influence on the pulse; but when taken in a greater quantity, it diminishes from two to four beats in a minute, and continues so for fifteen minutes or half an hour. Fresh beer has the same effect as water, but the pulse resumes its natural tone quicker, and is depressed the more sensibly as the beverage is continued. Wine accelerates the pulse, according to its quality; a strong wine produces the effects already mentioned in two or three minutes; brandy acts instantaneously. In cases of inebriation from wine or beer, the author has never found the pulse to exceed 116 in a minute. A warm theiform drink, taken from a quarter to three quarters of a litre at a dose, increases the pulse from six to twelve beats; but at the end of twenty minutes this acceleration is no longer perceptible.

Passing from this to the examination of the influence exercised during sleep and vigilance, the author has made the following observations:—1st, that during sleep the pulse is diminished; 2nd, that this diminution is the less sensible as the stomach is empty at the hour of retiring to bed; 3rd, that from midnight to two o'clock, the pulse is slower, and that soon after it becomes frequent. When a person is going to sleep, there appears to be no change; at the instant of awaking, on the contrary, there may be one or two beats less in the minute; but this is only to be observed when the awaking is gentle; if it is caused by any violence, there is an instantaneous acceleration

of from five to thirteen beats in the minute.

Study increases the pulsation from four to six beats in the minute. The author has observed that passion causes a great acceleration.

Of all the causes capable of augmenting the frequency of the pulse, there are none more powerful than exercise; it acts the most instantaneously, and its influence is stopped the quickest. Exercise entirely passive, as riding in a carriage, &c. produces but slight influence. Riding on horseback affects the circulation in a greater degree. The pulse of the author, which was ordinary at 72 or 75 beats in the minute, was increased by the horse merely walking to 85 or 90; when he trotted, it rose to 112 or 120, for the short time that this movement was kept up, which was for about a quarter of an hour; but as soon as the pace slackened, the pulse also diminished its frequency.

Simple walking in an horizontal path (60 or 70 steps in a minute) accelerates the pulse from six to eight beats. When the pace is doubled, and when two steps are taken in a second, the pulse, in those persons which in a quiet state is 80, rises immediately to 90 or 96; and if these persons continue to walk at that pace for half an hour, the pulse rises to 106 and 108. When the pace is so much increased that a person takes six steps in a second, the pulse is from 112 to 115. Ascending any height very much accelerates the arterial action; thus mounting a hill, the inclining of which rather rapid, is 230 feet long, raises the pulse to 120, although the pace might have been very moderate, and that it took two minutes and three quarters to attain quietly a similar height. If a person ascends the same hill in one minute and a half, the pulse will be at 160; if by running, it will become so rapid that it would be difficult in the first instant to perceive the number of its beats. On the ascension of a staircase of thirty-seven steps, in a minute and a half, the pulse would be from

115 to 120. It frequently happens that after walking for half an hour or an hour, that the pulse becomes intermittent every 10, 15, or 20 beats, in persons who during a state of repose have no irregularity in their circulation. The action of descending an elevation has not the influence that is so remarkable as that of the ascent, even when the pace is doubled; when a person descends a hill similar to the height of which we have been speaking, in 36 seconds, the pulse does not rise more than 116 or 120. The descending a staircase of thirty-seven steps in 20 seconds, does not produce more than 86 or 90 pulsations. Dancing has a very powerful influence on the pulsation; in persons whose ordinary pulsation is 75 in a minute, it is increased to 124, 144, or 148 beats by a continuation of the dance for ten minutes. Swimming produces the same effect; the author has counted 120 and 140 pulsations in persons who have crossed the Neckar by swimming. The pulse is always less frequent in a recumbent position than in a sitting one, and less in the latter than in the erect; thus the pulsation is more frequent by 10 or 12 beats in a person while he is standing than when he is lying; and when standing 6 or 8 more than when sitting. It should also be observed that these changes produced by different attitudes are more perceptible in the morning than at noon, and more at noon than at night. When after standing a person sits down, the pulse loses its frequency, but it is always more frequent by two or three beats in the latter position than in a recumbent one. After evacuations, either from the bladder or rectum, the pulse becomes less frequent by a few beats, but at the end of a quarter or half an hour it regains its former frequency.

Smoking tobacco, even by persons who have accustomed themselves to it, has a decided influence on the pulse. A pipe of tobacco smoked in the morning causes an increase of from 15 to 20 pulsations in a minute, and this acceleration is kept up for

an hour or more after the cessation of smoking: The author observes, that after walking, the smoking tobacco has the greatest effect on the frequency of the pulse. When the respiration is violently accelerated there is no great change takes place in the pulse; it may present from 2 to 4 beats more in the minute, but it is smaller. Speaking has scarcely any effect on the pulsation, provided the language be simple, monotonous, and without passion; but, on the contrary, if it be animated, it accelerates the circulation from 6 to 10 pulsations in a minute. Playing the flute for an hour, or an hour and a half, produces an augmentation of 3 to 6 beats. In diminishing the number of respirations the pulse also is diminished from 1 to 3 beats in the minute.

Compression of the large arterial trunks renders the pulse more frequent, and at the same time reduces its fulness.

From the author's observations it appears, that the barometrical state exercises no particular influence on the frequency of the pulse. It also appears evident that the pulse becomes a little more frequent on the approach of storms; that it preserves this frequency during the storm itself, and that immediately after it reassumes its habitual rhythm. In comparing many observations, made at times when the atmospheric temperature was very different, it has been generally found that the pulse is a little slower during cold than during heat. The seasons of themselves have no influence whatever. But if the animal changes of the atmospheric temperature exercise a very slight action on the pulse, it is not the case with regard to the change undergone from cold to heat, and *vice versa*. Thus when, on a summer's day, a person descends into a cellar, and sits on a cold body, or exposes himself to a current of air, the pulse becomes a few beats slower. When, on the contrary, during cold weather, a person enters

suddenly into a warm apartment, the pulsations are presently augmented from 6 to 10 beats in the minute. Cold baths perceptibly diminish the frequency of the pulse; but this diminution is not in proportion to the rapidity occasioned by warm baths.

Such are the valuable results that M. Nick has obtained, after having surmounted many difficulties, submitted himself to a great number of privations, and consecrated many years to researches, little brilliant in appearance but of much value in practical application, and replete with interest to the physiologist and the practical physician.

(To be continued.)

THE

London Medical & Surgical Journal.

Saturday, June 23, 1832.

INSULT ON THE PROFESSION IN
FRANCE.

NOTHING can more clearly show the unfitness of the present French government for the duties of its office than the base and brutal attempt which it has just made on the medical profession. In vain was it that every member of the faculty in Paris, from the highest to the humblest, from the veteran physician of fifty years experience to the novice of no more than a few months standing—in vain was it, we say, that when a fatal epidemic raged amongst the people, these heroic men gave proofs of humanity, and disinterestedness, and moral courage, such as no language can adequately describe. In vain was it, we repeat, that the whole medical community of Paris took so noble a part during the dreadful

visitation of the cholera ; for scarcely had they reposed from their perilous labours, when the French government, insensible to every consideration of gratitude, sought, by a single blow, to strike down the character of the profession from the exalted pinnacle to which it had been raised, and to stamp insult and ignominy upon it in indelible traces.

Our readers will see by the political journals of the day, that an ordonnance has been issued on the part of the French government, which in substance requires that all medical men employed by wounded persons, shall make from time to time a return of the names and descriptions of such patients. This document bears the signature of Gisquet, a prefect, but it is really the measure of the government, and the intention with which they issued it was to ascertain who the persons were that took the popular side in the last sanguinary struggle in Paris. It was set forth in this ordonnance, that the law now sought to be enforced was of antient standing, that it was never repealed, and that there was no hardship in reviving it under circumstances which called for the exercise of the powers it supplied. But these and the like excuses only aggravated the insult, and the members of the profession felt and acted accordingly.

The daily papers teemed with letters from physicians, surgeons, and members of every branch of the medical community, all displaying the most marked indignation, as well as the firmest resolution to resist a de-

creed so repugnant to every generous feeling,—so subversive of all confidence, between patient and scientific attendants. Never was honourable pride maintained in a better spirit—never was it manifested in a juster or a nobler cause. Some of the profession boldly declared that no power on earth should prevail on them to comply with such a regulation ; others again protested that their houses and effects should be sold in the public square under a government distress, sooner than act in conformity with the new ordonnance.

The effect will doubtless be to satisfy the base promoters of this wicked device, that there is no chance of its being carried into effect, and we shall not therefore be surprised to hear that the ordonnance has altogether fallen to the ground, a brutum fulmen, an object of contempt and indignation.

It is not merely for empty parade that we advert to the conduct of the medical profession in France : we have a higher object in view, that of exhibiting for the contemplation, and study of our professional brethren in Great Britain, the inestimable advantages of a union amongst themselves. From France they may learn that when the common interests, the common character of the profession are endangered, every member, every party, aye every faction into which it may unfortunately be severed, join in one bond of union, they forget all feuds, and misunderstandings ; personal hostilities become subordinate considerations—and every feeling that would interfere with the general harmony,

is sacrificed at the shrine of public good. May their example be profitable.

ANATOMY BILL.

THIS marvellous compound of absurdity, got up in ignorance, and persevered in with an obstinacy worthy of such ignorance, was read the second time in the house of Lords on Tuesday evening. Thus it has approached by a considerable stride, to within a very short distance of the goal. We have said enough on this Bill to rouse public attention to it; but it seems, so far as we can judge, that its fate is left entirely in the hands of Providence, for men—both Lords and Commons, appear to have a mortal dread of inquiring into its nature, objects, and details. We have done our duty—and will have no reason to blame ourselves hereafter for supineness in giving warning of the fatal influence of this measure.

CORONERS' BILL.

AN attempt was made by Mr. HUME on Wednesday night, in the House of Commons, to introduce a clause into the Coroners' Bill, requiring from candidates for the office of Coroner a certificate of attendance at Lectures on two courses of Medical Jurisprudence. The clause was lost on a division, by a majority of 80 to 11.

Observations et Reflexions sur la Réunion de la Médecine à la Chirurgie. Par NOËL de Rheims, Docteur en Chirurgie, ancien Chirurgien en chef de l'Hotel-Dieu, etc. In 8vo. pp. 251. Rheims, Guélon-Moreau.

Observations and Reflexions on the Reunion of Medicine and Surgery. By NOËL of Rheims, Doctor of Surgery, formerly principal Surgeon to the Hotel-Dieu.

THIS is truly one of the most extraordinary productions we have ever perused; it is a splendid specimen of dotage, for to nothing else can we attribute its appearance. At present it is out of its due place; to have carried conviction to the minds of its readers it should have been written three or four centuries ago. We can hardly conceive it possible that a surgeon, keeping pace with the progress of science, could deliberately take up his pen, and indite such a work:—and to prove what? that medicine and surgery should not be united; that there should be professors of each; and that surgery carries the prize from all the other arts and sciences which tend to the preservation of the human race!!! M. Noel warmly declares that the pre-eminence of his favourite science is generally recognized in Austria, that land of philosophers, where the students prefer the title of surgeon-doctor to that of physician. He attacks the medical doctrines of Broussais with considerable power, but is more especially inveterate against the re-union of medicine and surgery, which he declares highly injurious to the progress of science. Happily for the world and science generally, the majority of the profession differ in opinion from this writer, who, we admit, defends his view of the question very ably, although not sufficiently satisfactory to carry conviction, at least not to our minds.

BOTANY.

OUR principal object being to assist the medical student in the study of those plants which he is more particularly called on to know, we shall now proceed to the practical details that were promised in our last Number.

The plan which we have laid down is one that it has cost us much labour to execute; but if it serve to abridge the toil of any of our young friends, even for a brief hour, we shall be amply rewarded for our pains.

PLAN.

1. A list of all the officinal plants of the pharmacopœia, *which are to be seen in the garden of the Apothecaries' Company at Chelsea*. These plants will be alphabetically arranged according to their Latin names, and accompanied by their English names.

2. The number as it is found on the label fixed near each plant in the garden at Chelsea.

3. The Linnæan and Jussieuan characters of each plant.

4. General characters, with a few of the obvious peculiarities of each.

5. Officinal preparations, of which the plant forms the whole or a part.

MEDICAL PLANTS.

ACACIA catechu (catechu), No. 203. *Linn.* Polygamia monœcia. Order 1, class 23. *Juss.* Leguminosæ. Sect. 1, order 11, of Dicotyledones. Flowers in June; leaves two inches long. *Gen. char.* Hermaph; calyx five-toothed; corolla five-cleft, or formed of five petals; stamens 4—100; pistil one; legume bivalve. *Prep.* Infusion and tincture.

ACONITUM napellus (wolfsbane or common monkshood), No. 123. *Linn.* Polyandria trigynia. Order 3, class 13. *Juss.* Ranunculacæ. Sect. 2, order 1, of Dicotyledones. Flowers appear in July; they are of a cerulean blue colour on unifloral, erect pedicels. *Gen. char.* No calyx; five

petals; two nectaries; from three to five pods. *Prep.* Extract.

ACORUS calamus (sweet flag), No. 73. *Linn.* Hexandria monogynia. Order 1, class 6. *Juss.* Aroideæ. Sect. 2, order 1, of Monocotyledones. *Gen. char.* Spadix cylindrical, covered with florets; petals six; capsule three-celled. Found in marshes and rivulets; is plentiful in Norfolk and in Middlesex. Flowers in May and June.

ALLIUM porrum (leek root; allium sativum, garlick root; allium cepa, onion), No. 67, 68, 69. *Linn.* Hexandria monogynia. Order 1, class 6. *Juss.* Asphodeli. Sect. 5, order 6. *Gen. char.* Corolla six-parted; spathe many flowered; umbel heaped together; capsule superior. Plants more used for culinary than medical purposes.

ALOE spicata (spiked aloes, aloe vulgaris, hepatic aloes), No. 70, 71. *Linn.* Hexandria monogynia. Order 1, class 6. *Juss.* Asphodeli. Sect. 1, order 6, of Monocotyledons. *Gen. char.* Corolla erect; mouth spreading; bottom nectariferous; filaments inserted into the receptacle. *Prep.* Powders, pills, tinctures, wine, and decoction.

ALTHÆA (marsh mallow), No. 146. *Linn.* Monadelphia polyandria. Order 8, class 16. *Juss.* Malvaceæ. Sect. 2, order 14, of Dicotyledones. *Gen. char.* Calyx double; exterior six or nine cleft; capsules numerous, forming a vessel for a single seed. Flowers in June and July; grows chiefly in salt marshes. *Prep.* Decoction and syrup.

AMYGDALUS communis (common almond,) No. 112. *Linn.* Icosandria monogynia. Order 1, class 12. *Juss.* Rosaceæ. Sect. 7, order 10. *Gen. char.* Calyx five-cleft, inferior; petals five; filaments about thirty; germen downy, with a single style supporting a round stigma. *Prep.* Oil, emulsions, mixture, and confection.

(To be continued.)

LONDON UNIVERSITY.

DISTRIBUTION OF MEDICAL PRIZES.

THE annual distribution of prizes to the successful students of this institution, took place on Wednesday, May 16th. The meeting was held in one of the large theatres, and attended by most of the students, together with an immense number of spectators. The chair was ably filled on this occasion by Dr. LUSHINGTON, in lieu of the DUKE OF SUSSEX, who was prevented attending, in consequence of Parliamentary engagements at that period.

The President was supported by many members of the Council, and a numerous body of the proprietors of the University.

The business of the day was commenced by Prof. Thomson, who read the report of the Professors; which stated the school to be in a most flourishing state, and that the number of students, who had attended the classes during the present session, amounted to 252.

The following gentlemen obtained prizes in the undermentioned classes.

Anatomy.—Gold medal, J Robinson Noble, of Hawkeshead, Lancaster; 1st silver ditto, George Houlton, of Killingholme, Lincolnshire; 2nd ditto, Charles Nossoc, of London.

Practical Anatomy.—Gold medal, William Rayner, of Castle Moat, Lincolnshire; 1st silver ditto, W. K. Wright, of Bristol; 2nd ditto, John Bartlett, of Great Bedwin, Wilts.

Principles and Practice of Medicine.—Gold medal, James Wearne, of St. Ives, Cornwall; 1st silver ditto, John Storrar, of London; 2nd ditto, John P. Wall, of Ross.

Surgery.—Gold Medal, Richard Lanyon, of Camborne; 1st silver ditto, William Rayner, of Castle Moat, Lincolnshire; 2nd ditto, David Hartley, of Bristol,

Midwifery.—Gold medal, George P. Gill, of London; 1st silver ditto, William Rayner, of Castle Moat, Lincolnshire; 2nd ditto, J. N. Hudleston, of London.

Materia Medica, and Therapeutics.

—Gold medal, Francis Taylor, of York; 1st silver ditto, M. Foster of Holywell, Beds; 2nd ditto, George Allarton, of Warwickshire.

Chemistry.—Gold medal, Daniel B. Meek, of London; 1st silver ditto, Henry Cook, of Hampstead; 2nd ditto, A. M. a'Beckett, of London.

Comparative Anatomy.—Gold medal, Davyd W. Nash, of Bristol; silver ditto, John Storrar, of London

Medical Jurisprudence.—The prize, P. Henry Chavasse, of Birmingham.

Botany.—Gold medal, R. B. Hinds, of London; silver ditto, John H. Rogers, of London.

When each gentleman had received his merited reward, the President delivered an excellent address; although short was pithy, and exceedingly well adapted for the occasion.

Hospital Report.

ST. THOMAS'S HOSPITAL.

Colica Rachialgia.

JOHN HYNN, aged 23, of a robust habit, was admitted June 12th, into Jacob's Ward, under the care of Dr. Elliotson, in consequence of labouring under colica pictonum. States that he has been working in a lead manufactory for some time. About eight or nine days previous to his admission, he began to feel unwell; had no appetite; continually felt more or less a sensation of nausea; had a slight pain at the pit of his stomach, which would leave him at times; and of a morning, on getting out of bed, has been troubled with cramps in his thighs, legs, and feet; and thus he continued for about eight days, when violent vomiting came on, succeeded by severe pain in the epigastrium. He was now brought to the Hospital, the sickness continuing, throwing up bile, mixed with other morbid secretions. The pain was very severe, extending from the epigastrium to the navel, the hypochondrium, the loins, the thighs, and legs. His bowels had not been opened for nine days before his admission; his coun-

tenance indicated great distress; urine natural; pulse nearly the same.

V. S. ad Oj.

R. *Hydrarg. submuriat.* ʒj.; *statim*; *ol. croton*, gr. j.; 2 *da quæqua horû donec alvus soluta fuerit.*

Slops.

13th. Passed a restless night; his bowels have been opened; the pains have greatly diminished.

Applicat. hirud. xx abdom.

R. *Ol. ricini*, ʒss. *statim.*

14th. Much better; does not complain of any pain about his abdomen, but of a soreness about the pit of his stomach, and likewise pains about the soles of his feet and extremities of his toes, the latter are somewhat red and swollen; pulse small, 80.

16th. He is now got quite well, and walking about the ward, only complaining of weakness about his shin.

LIST OF BOOKS.

A PRACTICAL Treatise on Diseases of the Skin, arranged with a view to their constitutional causes and local characters, and including the substance of the Essay on these subjects, to which the Royal College of Surgeons gave the Jacksonian Prize. Third Edit. corrected and enlarged, By Samuel Plumbe, M. R. C. S., Senior Surgeon to the Royal Metropolitan Infirmary for Children, &c. &c. Svo. pp. 470. One coloured plate. London: 1832. Renshaw and Rush.

This excellent work has long been favourably known to the profession. Its arrangement is natural and practical, and much less complicated than that of either Willan or Bateman.

NOTICES TO CORRESPONDENTS.

M. W. H. An army or navy surgeon, who commenced practice after 1815, cannot act as apothecary in England or Wales, unless licensed by the Company of Apothecaries. The contrary opinion arises from the cessation of the following Act of Parliament. In 1825, an Act was passed 6. Geo. IV., which enabled army and navy surgeons to practise as apothecaries, but that act continued in force for one year only.—*Willcocks on the Laws relating to the Medical Profession*, 1830. The Apothecaries' Act is therefore the only one now in force, and must be obeyed.

A Pupil of Guy's Hospital.—Our correspondent complains of the irregular attendance of the Medical Officers, most of whom he asserts do not arrive earlier than two and often three o'clock P.M.

Freedom.—Will act as he pleases.

J. H. An affidavit of the Master's Son proving the servitude of the apprenticeship, will be received as conclusive evidence by the Examiners at the Hall.

A. T. R. The Company will stay proceedings, if the defendant present recent tickets of admission to the lectures of any of the recognized lecturers.

J. G. Any gentleman devoted to the study of Botany, who is recommended by three Fellows, is entitled to a ballot for admission into the Medico-Botanical Society.—When the applicant resides more than a hundred miles from London, he can become a corresponding member.

H. R. R. A case of Spontaneous Combustion so well attested, will be acceptable.

E. S. Dispensary practice is not allowed, unless there be a Medical School attached to the Institution, at which such practice is observed. This rule was made, as the University of London has a Dispensary attached. There are, we believe, but two other Dispensaries in London in which there are Medical Schools, the General Dispensary, Aldersgate Street, and the Westminster Dispensary, Gerrard Street, Soho.

A Medical Student.—Dr Quain's Work on Anatomy will be published before October next.

Dr. Aldis.—The paper will appear in our next.

Baron Dupuytren's Lectures.—Press of matter obliges us to exclude, the continuation of Baron Dupuytren's Lecture on the treatment of fractures of the neck of the femur, until our next.

H. W. M.—Press of matter obliges us to leave the article in type, until our next.

Dr. Seed's Letter next week.

A CASE OF REAL DISTRESS.

THE individual whose case we laid before our readers on the 5th ulto. is now incarcerated in the Debtor's Prison, Whitecross Street. His wife is near her confinement, and is with two small children suffering the most painful distress, being deprived of a home. Her unfortunate husband is compelled to take the benefit of the Insolvent Act, but has not the means of doing so. He is even unable to pay a few shillings prison fees, and is therefore deprived of the small comforts of the wretched place in which he is confined.

Most of our readers have perused Sterne's picture of the captive; it is truly applicable to the individual whose case we advocate. The iron has entered into his soul. It would be an outrage to the humanity of our profession, were we to proceed farther with this gloomy picture. Those who have once encountered the inevitable difficulties which obstruct the progress of the young practitioner, and whom fortune has since favoured, cannot but assist a brother practitioner, oppressed by such severe misfortunes.

Since the above was written, we have received from a friend 10s.

London Medical and Surgical Journal.

No. 22.

SATURDAY, JUNE 30, 1832.

Vol. I.

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,
During the Session of 1831-32;
BY BARON DUPUYTREN,
PRINCIPAL SURGEON OF THAT HOSPITAL.

Treatment of Fractures of the Neck of the Femur.

IN permanent or continued extension, one power is applied to the pelvis, the other to the foot, acting in opposite directions, so as to prevent the broken portions from riding over each other. It is according to this idea that the greater part of those practitioners, who have paid especial attention to this accident, have exercised their inventive faculties; hence that immense variety of apparatus which has been produced, and which no longer exists, save in the history of the science. To fulfil these indications, the bed of Hippocrates was invented; the glossocôme described by Ambrose Paré; the gouttiere of Fabricius Hildanus; the proceeding of Guy de Chauliac; the apparatus of Bellocq, Gooch, Aitken, Heister, and Petit; the process of Bruninghausen, of Vermandois, &c., were all directed to this intent, with various others, too numerous to mention.

Desault himself, on this principle, thought that it was right to neutralize the muscular force, which was in constant action, by mechanical power. This course was first employed by him at the Charité, then at the Hotel-Dieu, and adopted by the numerous pupils attending his school. Nevertheless it was soon seen that it was far from succeeding in all cases, for the muscular action speedily overcame mechanical force. The long splint of Desault, whatever its inconvenience may have been, had at least the great

advantage that it could be procured every where, while the modifications which were made in it, often very expensive, almost always very complicated, could not be generally employed. Besides all these measures had a bad foundation, as they tended to keep the parts in a state of extension, which is extremely injurious, as I shall presently point out. I have already said that extension is injurious, I shall not return to that part of the subject; but this extension may cause serious accidents to the patients, and these merit our attention. In fact, the individuals are under the influence of two powers, acting in contrary directions; this action is exercised on the skin of the pelvis, which it compresses strongly; this effect is more marked on the leg, where the skin is compressed on the tendons and bones. What is the result? Violent, insupportable, atrocious pain, which may be followed by inflammation, suppuration, or gangrene. Thus it has happened, that after the apparatus has been applied for twenty days, it has been found necessary to remove it, and eschars of greater or less extent have been found on the thigh, leg, or foot, and many patients have sunk in consequence. Others have been obliged to abandon this method of proceeding, on account of the violent pain it induced, and have only been cured with considerable shortening.

Can these accidents be prevented? We have endeavoured to do so, by all the measures which can possibly neutralize the effects of this compression, by padding the apparatus with cotton, but without avail, and therefore this proceeding has been abandoned, being convinced that it was unnatural. I may add that, however exactly it may be applied, it frequently leaves a shortening as its consequence.

On reading the surgical works of Pott, I was astonished to find that that author had not recommended his plan of relaxation to be applied to fractures of the neck of the femur. I supposed that it was through forgetfulness, and I determined to repair his

fault by applying it in those fractures. I made at first many attempts unsuccessfully. The first apparatus which I employed was a double-inclined plane, made of wood, covered with cushions, and united by a hinge, so that the inclination might be varied according to the case; but the bend of the knee resting on the apex of these two planes, caused a degree of pain which became intolerable; in one case the long-continued and constant pressure on the parts caused gangrene of the upper part of the calf of the leg.

I endeavoured to place the patients on the side of the injured limb, but the weight of the body acting on the great trochanter, caused inflammation and gangrene, and besides, always pressed the lower fragment inwards, and thus the effect of the position was destroyed. I then placed the patients on the opposite side, but the same inconveniences were reproduced; the position was too difficult to be preserved, and then the fragments were not in apposition. Then I returned to the position on the back, in spite of the inconveniences resulting from the constant pressure on the soft parts covering the sacrum and coccyx, and often causing inflammation and eschars, especially in old men; but these inconveniences are common to all methods, and are far from being peculiar to this. The tonic action of the muscles was to be opposed, and their contraction prevented; the double inclined plane which we employed united these advantages; by it the thigh is flexed almost to a right angle with the pelvis, and the leg to a right angle with the thigh, or nearly so. This position is incontrovertibly that in which the muscles are most relaxed; it is remarkable that as soon as it is adopted, the deviation outwards ceases. We only required then to find the means of keeping the limb in this situation, which we accomplished by means of pillows. The apparatus is thus made; a double pillow, made round like a bolster, and kept in that situation by ribbon, is placed at the top of a double inclined plane, made by several pillows placed one above the other, and sewed together; one of these inclined planes extends from the bend of the knee to the tuberosity of the ischium; the other to the heel, the junction or apex of the planes corresponding to the bend of the knee. The leg is fixed by passing a sheet folded like a cravat over it, and fastening each end to the sides of the bed; another may be placed in like manner over the middle of the thigh, to keep the patient more effectually in that situation. During the first month the thigh is raised every day, or almost every day, by drawing down the lower fragment by gentle traction, in order that it may be in perfect adaptation with the superior. When the consolidation is supposed to be effected, the inclined plane is gradually lowered by taking away one of the pillows until the whole is removed. The patient should keep his bed for some days afterwards without once leaving it,

and when he does, it should be with great precaution.

By pursuing this method of treatment a cure is easily effected, exempt from serious accidents during the application of the apparatus, and most commonly without shortening, or at least so very slight that it can be readily disguised by wearing a heel a little higher than the other.

CASE 1.—*Fracture of the neck of the femur; cure without shortening or deviation.*

M. —, aged 58, small stature, but of a good constitution, being roughly struck by a passer by, fell on the left trochanter, and vainly attempted to rise; she was immediately carried to the Hotel Dieu.

She was received on the 21st of July, when she complained of severe pain in the left groin and buttock. The patient lying horizontally in bed, the left lower extremity lies on its external surface, the leg slightly flexed on the thigh; the knee turned considerably outwards, is situated an inch above that of the opposite side, which is easily ascertained by comparing the upper edge of both patellæ; the foot lies on its external surface, the great toe is turned outwards, while the heel directed inwards, corresponds to the interval between the malleolus internus and the tendon Achillis of the opposite limb.

The severe pain complained of by the patient in the trochanteric region and in the groin is considerably increased by the rotary movements given to the limb to ascertain the extent of the circle described by the great trochanter, which extent is considerably diminished; there is likewise considerable tumefaction at the upper part of the thigh, which appears distorted. When desired to raise the left foot, she attempts it in vain; it can only be accomplished by increasing the flexion of the leg. If the limb is raised and abandoned to its own weight, it falls again, the lever which it represents wanting a point of support; the slightest effort at extension and rotation inwards suffice to restore the natural length and direction of the limb, which are lost as soon as it is abandoned to itself. There cannot be a doubt that fracture of the neck of the femur had taken place, although crepitus was not heard. Sufficient unequivocal signs of fracture existed, without having recourse to other measures to perceive crepitation; this sign, useless in this case, is very difficult to obtain in these kinds of fracture, which are padded by a thick layer of soft parts, and it can frequently be only procured by committing further mischief, either on the soft parts, or by increasing the rent in the capsular ligament.

The patient was put in the bath and immediately afterwards placed on the double inclined plane of pillows, already described: the extremity was retained in this situation by the folded sheets. On the 11th of July, the patient complained that the pillows were incon-

venient, and caused a slight pain in the knee, owing to the parts not being accustomed to this position; the pain in the groin had disappeared; the deviation outwards of the limb was gone, and on bringing the knees together, it was found that the patellæ were on a level. In a few days the patient became accustomed to the inconvenience produced by the pillows, and the fixed position of the limb, and did not complain of any pain. The apparatus is carefully examined every day, and the limb retained in a proper direction; when the plane sinks in, a doubled pillow being placed on a level with the bend of the knee. From time to time it is necessary to have the bed made; but the limb is always kept in the same position while on another bed, and immediately replaced on the plane.

The 9th of October (the ninety-ninth day of treatment) the sheets keeping the limb in situation are removed, and the extremity thus set at liberty is already capable of a degree of motion. The patient can slightly raise the foot. By bringing the two limbs in apposition, it is easy to perceive that the two patellæ are on a level.

On the 12th of October and following days, the pillows were gradually removed, and it was observed that the movements became of greater extent, and were executed with more facility.

On the 25th of October, she could raise her limb very easily; it had its natural direction; she was allowed to sit on an arm chair, the weight of the body not being yet trusted to the fractured bone.

On the 29th of November, she could walk easily with crutches. There is neither shortening nor eversion, and in a few days it will be impossible to say that one of the lower limbs has been fractured.

This case is an irrefragable argument against the opinions of those who have thought and written that consolidation of the neck of the femur, without shortening, cannot possibly take place. This proceeding is essentially based on anatomical and physiological knowledge, and it is easy to perceive how far it exceeds all the other modes of treatment hitherto employed. Can any thing be conceived more simple than two or three pillows, and two sheets folded like cravats, or any other process which will better fulfil the indications? Scarcely is the limb placed on the double-inclined plane ere it recovers its natural length, and its tendency to eversion outwards completely disappears, as may be easily supposed by reflecting on the position of the parts; in fact, the leg being flexed on the thigh, and the thigh on the pelvis, there necessarily results a complete relaxation of all the muscles capable of acting on the fragments, and especially of the three adductors, which, from their force and their insertion on the posterior and external surface of the lower fragment, cannot contract without pulling up this portion of the bone, and turning

it outwards; hence, if the action of muscles, the only agents of displacement, is neutralized by position, the fragments necessarily remain in contact. Every day's experience in the treatment of fractures proves the advantage derived from the use of this passive extension, in opposition to the other mode of extension, which almost always requires the exertion of a power too often injurious to the parts to which it is applied. But this is not all. M. Dupuytren's apparatus has the great advantage of not causing any pain and scarcely any inconvenience. The patients require to remain 90, 100, 120 days, and even more, because as this fracture generally occurs in old persons, consolidation takes place more slowly, and also as on account of the angularity of the neck of the femur, all the weight of the body is transmitted to it by the pelvis, it requires a greater degree of firmness in the callus than is necessary in other fractures.

CASE 2.—*Fracture of the Neck of the Femur; fall on the great trochanter; symptoms very evident; position of the limb on the double-inclined plane; perfect consolidation; discharged on the ninety-fifth day.*

Pétronille Jeanne Béquend, aged 67, of a strong constitution, and enjoying habitually very good health in spite of her age, entered the Hôtel-Dieu the 9th of January, 1831, for a fracture of the right neck of the femur. It was caused by a fall on the great trochanter. When the accident happened she suffered severe pain in the hip, and could neither move the thigh nor raise herself. She was brought the next day to the hospital, when the limb presented the following appearances: it was shortened at least two inches, turned outwards, semi-flexed, the heel of that limb being placed above the malleolus of the other, the great trochanter less prominent and nearer the crista ilii. On rotating the limb the trochanter no longer describes a circle, but turns, as it were, on a pivot. This sign, however, to which Desault attached so much importance, is not so valuable as is supposed, for it is very difficult to make the thigh describe these arches; and besides, as these movements cannot be performed without pain, muscular contraction ensues, which may hinder the surgeon ascertaining whether the trochanter describes these arches or turns on a pivot. It also varies according to the situation of the fracture; it is scarcely to be perceived if the fracture occurs near the great trochanter, much more so when it takes place near the head of the bone.

The limb could also be readily restored to its natural position, but when released it invariably retook its vicious position; this sign is diagnostic, and distinguishes this accident from contusion, luxation, or hip-disease. In contusion the patient suffers pain and cannot raise the limb, but there is no shortening, nor

eversion outwards. The facility with which the limb is brought to its natural position, prevents its being confounded with luxation; and in hip-disease, there is first elongation, then shortening of the limb, but, in this case, the patient always suffers pain in the knee, and extension does not restore the limb to its natural position.

The patient also suffered severe pain in the joint, and she could not raise the limb; a severe contusion existed over the great trochanter. The disease being recognized, M. Dupuytren had the limb reduced, and the patient then placed on the doubleinclined plane of pillows. The sheets were likewise placed, and a small cushion under the sole to prevent the turning backwards of the foot, and to keep it in its natural position.

This apparatus can always be procured and renewed with great facility; it places the limb in the natural, and consequently least fatiguing situation; it neither bruises the parts, nor causes the formation of eschars; it restores the natural figure to the limb, and preserves it by a gentle continued extension, which takes place in the following manner: the bend of the knee, and consequently the lower fragment, being fixed in an elevated position by the apex of the plane, the pelvis kept down by its own weight, draws with it the upper fragment, so that one is kept fixed, and the other lowered, in relation to the position of the parts.

Cold water was applied to the contusion on the great trochanter. At the end of 75 days, the apparatus was gradually removed, when the consolidation was perfect, and both limbs had the same length and direction. No accident occurred during the treatment. She used an arm-chair at first by the side of the bed, and then used crutches. On the 4th of April, 95 days after her admittance in the hospital, she left it cured, making good use of her limb.

Let us now compare these positive results with the effects of fractures left to themselves. Either no cure takes place, or one attended with such deformity as to render the limb incapable of performing its functions. In fact, the head of a bone which has once left its socket, never re-enters it of itself. Some examples of spontaneous reduction of the lower jaw, the humerus, base of the phalanges, &c., only confirm this rule, being the result of weakness in the ligaments and muscles, which allow the dislocation to be reproduced as readily as the reduction was effected. The muscles placed around a bone, when it is dislocated, instead of reducing, tend rather to withdraw it from its socket, or at least to prevent its reduction. Nature, which can triumph over almost all difficulties, and obstacles opposing its laws, appears to make only powerless efforts to restore motion in this case. In vain are new cavities formed; always incomplete, they can never replace the old ones, while the muscles, directed out of their proper

situation, and compressed, cannot perform their accustomed actions. Besides irritation may be set up; tumefaction, suppuration, abscesses, and caries, may take place, and death be the result.

By M. Dupuytren's method, on the contrary, all these accidents are prevented, the patient suffers little, and at the end of a longer or shorter time, varying according to age and strength, he recovers the use of his limb, and with so little deformity, that the existence of the fracture frequently cannot be recognized.

ROYAL COLLEGE OF SURGEONS.

LECTURES

ON THE

PHYSIOLOGY OF THE BRAIN AND NERVOUS SYSTEM,

BY SIR CHARLES BELL, F.R.S. &c.

PROFESSOR TO THE ROYAL COLLEGE OF SURGEONS;

April 28th, 1832.

MR. PRESIDENT,

IT is my intention in this lecture to commence the consideration of the Nervous System. The nerves have higher qualities than the other structures which have been the subject of my former lectures; by studying them, and becoming acquainted with their properties, we shall understand every living property—every function and every structure of the animal frame. I think, then, I am justified in denominating the nervous system the highest department of anatomical and physiological study. When we examine a dissected body, in which all the nerves are displayed, we find at last inexplicable confusion—a mere mesh of which nothing can be made; but when we examine another body dissected with the same care, we find every little filament exactly in its place, and all its connexions precisely the same as in the first; there is nothing like chance in the arrangement of the nerves; what appears on a superficial view to be confusion, is perfect symmetry and regularity. With respect to the functions of the nerves, from Galen to Berzelius—from Berzelius to Willis, there were the same ideas, the same errors, and this because they viewed the subject in the same aspect. Before investigating a subject like this, a certain preparation of the mind is necessary; and if we set out, blinded by prejudice, our conclusions cannot be true. The grand error which so long prevailed, consisted in considering the brain as the centre and source of all qualities possessed by the nervous system. How natural was this idea! They found every nerve con-

nected with a vast mass of substance, and this mass supplied with a quantity of blood far greater in proportion than any other organ. They knew that parts possess power only as long as they are supplied with arterial blood; and supposing that this fluid merely served the purpose of furnishing a supply for secretion, they conceived the idea that the brain was a gland, secreting the nervous fluid, to be conducted along the nerves to the various parts of the body. They were confirmed in this belief by finding that when a nerve was divided, the sensibility of the organ it was sent to was cut off. The ancients knew that one quality of the nerve might be taken away, and another left, that a nerve deprived of sensibility might still be subservient to motion, and *vice versâ*; and then they talked of sensorial spirits and motor spirits, and the deprivation of one or the other of these spirits. They considered too that soft nerves were for sensation, and hard ones for motion; thus we have the *portio mollis*, and *portio dura* of the seventh pair.

Let us examine a nerve. It is a hard firm cord. Many have been the hypotheses on the firmness of the nerve; but the matter of the nerve is not hard, it is the sheath or sheaths of the nerve that constitute this firmness. The outermost sheath is the *dura mater*, a firm dense membrane; next, internally, there is another neurilemma, a very delicate one; and again a third of greater density and less vascularity than the second, the *pia mater*. The proper matter of the nerve is exactly alike in all parts, and is contained in tubes of cellular membrane; or, if you please, of *dura mater* and *pia mater*. In all situations the matter of the nerve is the same, though in some parts it is better protected than in others. Nothing like power of motion is to be observed in a nerve, nothing analogous to muscular contraction. There is one property worth noticing—a nerve is composed of threads, but not straight ones, they are zigzag; and I do not know any thing that I can compare them to better than a thread drawn from an old stocking. In this manner the nerve possesses elasticity, and in no other way; and this property is conferred upon it, in order that, in the various motions of the limb, along which it courses, it may be enabled to become elongated without its soft material being disturbed. In proof of this opinion, we find that, where there is most motion, this zigzag disposition is most distinct.

It has been alleged by Abernethy and others, that the property of sensation in a nerve is to be explained by analogy with muscular fibre—that contraction takes place analogous to that of muscular fibre. Dr. Darwin thought that the retina was fibrous, because after maceration he could draw it out into threads. But it was not the retina which he thus drew, it was only its cellular tunic—the *tunica vasculosa*. He was decidedly

wrong in the anatomical fact, and I think he was mistaken in his conclusion. A person looks steadily at an object, and then shuts his eye; he still sees the object; after a time the vision vanishes, and again after a time returns. The explanation offered by those who consider that sensation takes place by means of contraction is this, that during the continuance of the impression on the retina the nerve is in a state of contraction, and that during the non-existence of the impression the nerve is relaxed; an alternation of relaxation with contraction producing the phenomenon. But I think it may be explained in a different way altogether. I observed in a former lecture, that for the full performance of the functions of the eye, two properties are required to act together—the motion of the eye, and the power of vision; you see, and are conscious of the direction of the eye. Now when the eye is closed, the impression of the object it has just been viewing will remain as long as its position continues exactly the same as when it was viewing that object; but if the eye move in the slightest possible degree from that position, the impression vanishes, and when the situation of the eye is restored the image is restored likewise. It is wrong to suppose that there is any structure in a nerve capable of acting like a muscle.

Whenever an impression is made on a nerve in any part of its course, the idea excited is, that the impression is made on its extremity. It is exceedingly useful in practice to be aware of this fact. I have frequently had cases where pain in the foot was produced by a cancer in the pelvis. Mention of this leads me to another fact, which is perhaps more important, but is less easily explained. It is found that, when an external part and an internal viscus are supplied by two nerves proceeding from the same origin, any irritation present in the *internal organ* will produce pain in the extremities of the *external nerve*. This is an universal law, but I think not generally known to be such. When the liver is inflamed, pain is felt in the shoulder; this is known to every one. Irritation about the heart will cause pain in the *mammæ* and elbow. If the duodenum be dilated or affected with spasm, there is pain in the back; if the colon be too much loaded or distended, there will be a pain resembling rheumatism in the back. Pains like those of a woman in labour attend, more or less, all disorders of the uterus. The law is, I repeat, that the external part will suffer, though the internal organ alone is disordered, if they are supplied with nerves from the same origin, or with branches of the same nerve.

If we examine the matter carefully, we shall be led to observe how important and necessary the circulation is to the nervous function. Pressure on a nerve deprives it for a time of its due supply of blood, and its

functions cease. This circumstance might lead to the conclusion, that the nerve is not a mere tube destined for the conveyance of principles elaborated elsewhere, but that itself possesses a vital property, supplied, like all other vital properties, by arterial action. Let us approach the subject unbiassed, and instead of considering the brain essential to the nervous system, let us rather consider what properties may belong to an animal without a brain. Can the properties of a nerve be produced by any other anatomical structure? There is an end to philosophy, if we are to regard two different structures as capable of producing the same phenomena. When we look to the very lowest grade of animals, to such as polypi, we find that even they are susceptible of impressions, are capable of being influenced and excited by external circumstances, but in them we cannot detect any nerve. Are we to suppose that they are altogether destitute of anything like a nervous system, or that their nervous system is distributed in a manner different to that of higher orders of animals? These creatures possess life by means of the same nervous material as other animals, but in one form only. Nerves are internuncii, or conductors, and when we find an animal possessing any centre from which impressions are to be transmitted, then we require nerves. We find the mouth of the star-fish surrounded by a circle of nervous threads, from which filaments proceed to the moving tentacula. This is the first instance which we have of the existence of nerves. When we investigate a little further, we find that wherever there is an organ there is a nerve, and a little mass of nervous matter at the other extremity of it. Wherever there is a muscle, that muscle must be directed, and there are no other means by which such an object can be effected than by furnishing it with a nerve, from the centre, by which motion is governed; if these muscles or organs are irregularly disposed—if the body of the animal has no symmetry, there will be no regularity in the distribution of its nerves; but in a symmetrical animal, one which has a right side and a left, we shall find a corresponding regularity in its nerves. If you examine the earth-worm; its little nervous masses, or ganglia, are not immediately evident, yet we are certain that it has such ganglia. If you cut the earth-worm in two, one half writhes about, but makes no progress, the other half moves away. Now, if you look carefully to the part which retains power of locomotion, you will find knots of ganglia, its brain, or the ganglia appointed to direct motion, being in the anterior part. As parts become more developed, or disappear altogether, being succeeded by new ones, there is a corresponding change in the nervous system. In the larva of an insect we find knots, from which nervous filaments proceed in a diverging form to the legs of the animal; these nerves, as well

as the ganglia they proceed from, disappear when the creature has to be supported by wings. My purpose, gentlemen, is to draw your attention to these facts, that there are creatures showing sensibility, in which, however, you can find no nerve, but you must nevertheless suppose that they do possess nervous matter; that where you find distinct motion, you will find a nerve passing to the muscle from a knot of nervous matter; that all this is irregular, until you examine an animal that is itself regular, having a right side and a left, the system then deserving the name of a system; and that this system will become changed, if the animal itself becomes changed.

We must not pass over the opinions of Bichat, a man of great genius and power of mind, but too negligent of the opinions of those who preceded him, and of his contemporaries; from him we learn that there may be nerves not possessing sensation. I do not think, on comparing what is called the ganglionic system of the lower animals with that of the mammalia, that there is that similarity between them which some suppose. The sympathetic nerve, as it is called, was once described as being formed of branches derived from the fifth and sixth pairs, and in the dissecting room we used to trace it from the brain; the old idea of the brain being the universal centre, compelled us to trace even this nerve from the brain. However, before the time of Bichat, it was known that the brain is not the centre of the sympathetic, that it is not to be traced downwards, but upwards and downwards from its own large masses; for as more minute dissections were carried on, every day brought discoveries of new and extensive branches, till at last it was found that it sent filaments every where, and was connected with all the nerves of the body—a *universal plexus*. The subject was now taken up by Bichat, and he considered that there are two nervous systems, the brain being the centre of one, and the semilunar ganglia and solar plexus of the other; and that the latter system is of the same nature and performs the same office as the medullary ganglia in the lower animals. But the difference between these systems in the two classes of animals is important and well marked. Bichat himself has shewn that the nerves of the ganglionic system in the higher animals possess no sensibility, whereas in the lower animals they are the cause and source of sensibility and motion; surely there is a great and evident difference here. Why has this system been called the *ganglionic* system, a term so universally applied to it? Ganglions are not peculiar to this system; we find ganglia belonging to the nerves of the spinal marrow; and if we examine the affair more closely, it must be acknowledged that the ganglia of the spinal marrow are larger and more numerous than those of the sympathetic. But the influence of a popular writer obliges us to retain the term.

I have always contended against the idea of a resemblance between the ganglionic system of the mammalia and the medullary knots found in the lower animals. It is therefore agreeable to find that Müller has detected even in the mollusca a sympathetic chain, in addition to the so long talked of ganglionic system, which latter must now therefore be styled the spinal marrow of the creature, so that that matter is decided.

Fallopian gave us the term *ganglion*, considering these medullary knots to bear a resemblance to those protuberances or ligaments to which surgeons had previously applied the same name. There have been various opinions respecting their use; one physiologist considered them to be muscular; another that they are lesser brains, each one a centre of sensibility and energy, and that for every new organ there is a new ganglion; there is something worthy of notice in this opinion. Johnson conceived that their office is to cut off sensibility, considering that many functions of the animal are inconsistent with the mind, and would be impeded by mental influence, and that for the purpose of insulating certain organs from the seat of the mind, these *hard knots* are interposed. Monro and Scarpa had a contest respecting the use of the contents of ganglia; they found cineritious matter in them, and the question agitated was whether this substance merely separated the fasciculi of the nerves entering them in their course, or served as a point whence the filaments might begin and end. But as there are ganglia of different kinds, there never can be an end to a contest of this nature; they cannot make much of the matter while they examine and expect to find the same properties possessed by ganglia, differing so much, as do those of the spinal marrow, and those of the viscera. Having said thus much, it will now be necessary to enter upon the consideration of the office of the spinal marrow and its ganglia. I shall therefore, Sir, in my next lecture, speak of the anatomy and functions of the spinal marrow.

[We have received at least twenty letters requesting us to publish the deeply interesting and highly valuable lectures of Sir Charles Bell, and especially his opinions upon the nerves, delivered a few weeks since at the Royal College of Surgeons. Though we refrained from publishing these truly scientific lectures, we cannot but comply with the wishes of so many correspondents, premising at the same time that we give a few extracts only, as our reporter found it impossible to catch the language of the justly celebrated Professor, as he often spoke in a very low tone of voice. We need scarcely inform our readers that these lectures were attended by a numerous auditory, composed of the Examiners, Council, and Members of the College, with many distinguished foreigners.—EDS.]

THE
ANATOMICAL EXERCITATIONS
OF
WILLIAM HARVEY, M.D.

(Continued from page 652.)

CHAPTER VI.

By which ways the Blood is carried from the vena cava into the arteries, or from the right ventricle of the heart into the left.

THEN since it is probable that the connexion of the heart with the lungs, which they see in man I have said, has led to error on this occasion, they are to be censured in this who, whilst they desire to pronounce their opinion, to demonstrate and understand all parts of living animals, look but into man only, and even when he is dead, and thus only, just like those who, seeing the discipline of government in one republic, frame politics; or they who, knowing the nature of one piece of land, believe that they understand agriculture; or, as if from one particular proposition, they should endeavour to frame universal arguments. Nevertheless, were they as well versed in the dissection of animals as they are in the anatomy of human bodies, this thing, which keeps them all in doubt and perplexity, would, in my opinion, be elucidated to all without any difficulty. In fishes, for instance, having only one ventricle of the heart (not having any lungs), the thing is sufficiently manifested, for that the vesicle of the blood situated at the base of the heart is undoubtedly analogous to the auricle of the heart, to admit blood into the heart, and that the heart does afterward, through an artery or pipe analogous to an artery, openly transmit it, as seen both by our view and also by excising the artery; then behold the blood bursting out at every pulsation of the heart.

The same might be seen also in all animals in which there is but one ventricle only, or something answering to it. It is then not difficult to discern, as in the toad, frog, serpents, newts, which, although they are said in some manner to have lungs, because they have a voice (of the artifice of whose lungs it is to be wondered, and of all other respects I have very many observations by me, which are not suited to this place), nevertheless, from our own eyesight it is clear, after the same manner in them that the blood is taken from the veins into the arteries by the motion of the heart, and the way of it being patent, open, manifest, no difficulty nor no hesitation at this place. For the case is just so with them as it might be in man, in whom the septum of the heart were pierced through, or carried away, or should both the ventricles become one, no one then, I believe, will doubt which way the blood is able to pass from the veins into the arteries.

But seeing greater and numerous animals which have no lungs, others which have, and many greater and similar animals which have only one ventricle of the heart, many which have two, it is right to state, in almost all animals, and in many cases as universally the blood is transmitted from the veins into the arteries, through the sinus of the heart by an open passage.

But I have considered with myself, that this is also seen in those embryos which have lungs. In a fœtus there are four vessels of the heart, for instance, the vena cava, the vena arteriosa (pulmonary vein), the arteria venalis (pulmonary artery), and the aorta, or great artery, and these vessels are otherwise united in the adult, which all anatomists know perfectly well.

The first touch and union of the vena cava with the arteria venosa (pulmonary artery), which takes place before the vena cava opens itself into the right ventricle of the heart, or sends out the coronal veins, a little above its egression from the liver, exhibiting an anastomosis laterally, that is, a hole wide and large of an oval figure, made passable from the vena cava into that artery, so that through that artery the blood may be able to flow freely and copiously, out of the vena cava into the arteria venosa, and then to the left auricle of the heart, and thence into the left ventricle. There is furthermore in that opening against that place which looks towards the arteria venosa, a membrane thin and hard, like a cover, which afterwards in those which arrive at riper years, covering this hole, and uniting in every way, so that it quite obstructs and obliterates that foramen. This membrane, I say, is thus constituted, whilst hanging loosely with its own weight, it easily makes way into the lungs and heart, and is cast up, giving passage to the blood which flows from the vena cava, but impedes it from again flowing into the vena cava. So that hence we may imagine in an embryo, that the blood ought continually to flow through this aperture into the arteria venosa from the vena cava, and thence into the left auricle of the heart; and after that it has entered it is never able to return.

The other union is that of the vena arteriosa (pulmonary artery), which takes place after that vein egressing from the right ventricle, is divided into two branches; and it is as it were a third trunk or arterial canal, differing from the two former, hence drawn obliquely, and perforates in the arteria magna; so that in dissection of embryos, there appears as it were two aortas, or two springing roots of the great artery from the heart.

This canal likewise, in those that come to riper years, is attenuated by degrees, and at length fades away, and finally is quite dried up and lost, like the umbilical vein.

This arterial canal hath no membrane in itself to prevent the motion of the blood backwards or forwards, for there are, in the

orifice of that vena arteriosa (of which canal, as I said, and propagated) there are three sigmoid valves, which appear outwardly and inwardly, and easily give place to the blood flowing this way from the right ventricle into the great artery; but, on the contrary, impede any thing which may flow from the artery, or from the lungs, into the right ventricle, which they close firmly and entirely; so that here also we have reason to imagine, that in an embryo, whilst the heart contracts on itself, the blood must be continually taken from the right ventricle into the arteria magna, or great artery, by this way.

It is commonly said, that these two unions, so great, so open, and so wide, were made for the nourishing of the lungs, and that in those who become adults, when the lungs, on account of their heat and motion, require more copious nourishment, they should be abolished and consolidated, is an invention improbable and inconsistent; and that is likewise wrong which they say of the heart in an embryo, that it is idle and does nothing, moves not at all; whence it comes to pass, that nature was compelled to nourish the lungs, and to form those passages, when by our own eyes it is made plain to us, that both in the incubated egg, and in embryos recently cut out of the uterus, the heart doth move, as in adults, and likewise that nature is urged with no such necessity. Of which motion not only these eyes have been often witnesses, but also Aristotle himself says, *Lib. de Spir. cap. 3*, "That the pulse appears at the very beginning like the establishment of the heart, which is found in the dissection of living animals, and by an egg in the formation of the chick." But we also observe those passages to be open and free, which is also the case in the human race, and also in other animals, not only to the time of birth, as anatomists have carefully observed, but also for very many, many months after, yea in some for many years, if not, I say, for all their lifetime, as in the goose, and various other minor birds. Which thing, perchance, did impose on Leon Bottallus, as he gloried that he himself had discovered a new passage for the blood from the vena cava into the left ventricle of the heart. And I do confess, that when I myself first found this to exist in a rat, who had arrived at the age of puberty, I was led in some manner to believe it.

From which it is understood, that in the human embryos, and likewise in others, in which these unions are not done away with, this very thing appears; that the heart, by its motion, brings forth the blood from the vena cava openly into the arteria magna, through most complete ways, by the drawing of both its ventricles. Forasmuch as the right receiving the blood from the auricle propels it through the vena arteriosa into the great artery, and its branch (called canalis arteriosus), likewise the left, at the same time, by

the mediation of the motion of the auricle, receives that blood which is brought into the left auricle, through that oval aperture from the vena cava, and by its tension and constriction drives it through the root of the aorta, and likewise into the great artery at the same time.

So in embryos that are gifted with lungs, and have no action or motion for them, is just like the condition of those creatures who have two ventricles to the heart, for the purpose of transmitting the blood. And so the similar condition of embryos who have lungs, whilst they make no use with their lungs, and is like those animals which have not lungs.

Therefore in these likewise the truth is clearly elucidated that the heart by its pulsation draws forth and transfuses the blood from the vena cava into the great artery, and then through as open and patent ways as if both the ventricles were made pervious to one another (as I said before) as in man, by taking away the septum between them. Then seeing for the greater part these most patent ways are open in all living animals at some time, which serves for the transmission of blood through the heart, it now remains that we learn why in some animals, as in man, and those who are older, and in warm blooded animals, we imagine not to be done through the substance of the lungs, which nature effected before in an embryo through these same passages, at that time when there was no use of lungs, which it would appear to have made of force for the want of a passage through the lungs: or why is it better that nature (for she always does that which is best) hath altogether shut up those patent ways of which she before made use of in the embryo and fœtus, and it is used in all other animals, nor in want of them hath found out any passage for the blood to pass, but prevents it altogether in the above manner. So the thing has arrived to this; that to those who seek for the ways in man, through which ways the blood passes from the vena cava into the left ventricle, and from thence into the arteria venosa) it were more worthy their researches and more rightly done, if in the dissection of living animals they would ascertain the truth, and inquire into the cause, why then, in greater and more perfect animals, they would rather wish the blood to be forced through the parenchyma of the lungs than through most patent passages, as in all other animals; and then they will be able to understand that no other way or passage could be imagined. Whether this be, that greater and more perfect animals are warm-blooded, and where they come to be of age I say, their great heat is very likely to be suffocated and inflamed, and therefore the blood is strained and sent through the lungs, that it may be tempered by the inspiration of the air, and freed from boiling and suffocation, or some such similar thing.

HUNTERIAN SOCIETY.

The following is an outline of the subjects which have come under discussion at the Hunterian Society during the present year.

Affections of the Brain and Spinal Marrow.

Hydrocephalus; cases related in which the disease was attributed to the cure of porrigo larvalis. Instances in which issues made in the scalp—by placing beads in incisions five inches long in adults—were of great efficacy. Bleeding and purging were premised in the state of excitement. Other cases of the utility of deep ulcerations by means of blisters, antimonial and hydriodate of potash ointment.

Paralysis; efficacy of issues in the scalp in cases of hemiplegia. Successive blisters to the back in paralysis from teething. Cases of the utility of strychnia in the dose of 1-16th of a grain four times a day. Necessity of regarding the cause—and cases related of paralysis from copious bleeding—from excessive venery—and from the uterine excitements preceding puberty in females—inducing sympathetic affection of the spinal marrow, and then acting on the lower limbs. This form was elucidated by reference to experiments on dogs. If on tying the abdominal aorta the smallest filament of a nerve were included, paralysis of the hind limbs and death resulted. Case of paralysis from hydrocephalus consequent on irritation in the uterus from tumours. Other cases from the rupture of large or of small vessels—from *ramollissement*—and from tumours. Cases also related from effusion into the spinal canal—or disease in the spinal cord. In some instances of paralysis of the lower limbs, though the back had been first complained of, the head alone was found diseased after death. The lower part of the spine considered to indicate early the weakness attendant on head affections. Curious fact

alluded to of paralysis generally beginning at the extremity of the nerve. Paralysis of the face often a local affection from the external application of cold. Cases shewing the efficacy of local irritation—and of cordial remedies—and an instance of the mischievous effects of bleeding in a strumous youth. Paralysis said to occur in the ends of the fingers of type-founders.

Brain; disorganization of—without being attended with the usual signs. After a blow on the head four months elapsed with little inconvenience. The term of utero-gestation was completed, and then came on paralysis, coma, and convulsions ending in death. The middle lobe of the brain was completely disorganized, and the others not healthy. A gentleman had been dyspeptic for twelve months, but never complained of his head. The evening before death he made up intricate accounts, and suddenly expired while attending at church as warden. An abscess had formed in the left hemisphere and a vessel had ulcerated, so that effusion took place.

Spiculæ of bone; one projecting into each petrosal sinus, by which the dura mater of the part was thickened—intellect remained perfect, and death occurred from erysipelas unconnected with the state of the head.

Insanity in an old man; imputed to mercury and diuretics, and the absorption of ascitic effusion. Cases in which mercury pushed to excess in syphilis produced mania—supposed to be connected with a predisposition to disturbed intellect.

Affections of the Chest.

Whooping Cough; epidemic in the beginning of the year—cases of the efficacy of sulphates of zinc and quinine, when unattended with inflammation—and of tartarized antimony, and calomel, during inflammation.—Case of repetition of whooping cough to seven times.

Larynx; instances of malformation

in one family—all the children born with croupy cough.

Affections of the Abdomen.

Abdominal aorta; case exemplifying the beneficial effects of rest. There was a popliteal aneurism as well as aortic. The man strictly observed rest for two years, and died from the bursting of aneurism in the ham. The aortic aneurism was situated just below the diaphragm, and had diminished in bulk. At two places posteriorly the parietes were destroyed, and the bodies of the corresponding vertebrae were absorbed, leaving the intervening cartilage like a band. Fibrine had been deposited, and prevented the escape of blood. A similar deposition had taken place into the cœliac, superior gastric, and mesenteric arteries. In another case the aneurism burst into the duodenum. A case of diffused aneurism—first indicated by the violence of pulsation at the groin. In a few days the abdominal tumour became of enormous size. A small aneurism above the emulgents had given way, and blood was injected into the cellular substance.

Stomach; case of extreme spasmodic contraction—sudden in its occurrence, and refusing the admission of food during 48 hours—forcibly ejecting it as it reached the cardiac orifice, without nausea: relieved in four hours by an opiate enema, and a hemlock poultice applied to the scrobiculus cordis. Cases in which the disturbed mind affected the pharynx, œsophagus, or stomach, so as to produce dysphagia, symptoms of stricture, or inability to retain food. The passing of a probang, said to be sometimes useful in giving a new direction to the mind.

Hernia; some cases of the efficacy of bleeding, and of opium in doses of four or five grains, in facilitating reduction. Case in which the same woman had exomphalus, and two femoral herniæ. One of the latter was irreducible, and terminated fatally. During the incarceration there had been plentiful

dejections; and it was found that only a portion of the calibre was strangulated, so that a finger could pass along the bowel. Hiccough was dwelt upon as an unfavourable symptom in cases of hernia—and the opinion of older surgeons that it indicated the existence of omentum in the hernia, or of sphacelation—disproved. Considered as the sign of enteritis or peritonitis. The great fatality of the operation for exomphalus adverted to.

Cyst, abdominal; which contained thirteen quarts of fluid—doubtful whether hydatid. Its parietes were attached anteriorly to the peritoneum, and posteriorly to the viscera. The ovaria were healthy.

Affections of the Urinary and Genital Organs.

Uterus; action of the *secale cornutum* on—several cases related. In some cases it had produced intestinal spasms, as well as uterine action. Eight cases related in which (in the repeated dose of thirty grains in infusion) it brought on uterine action where premature delivery was thought necessary. Instances of its efficacy in leucorrhœa and menorrhagia were related. Some experiments with it on rabbits were detailed—it produced all grades of inflammation of the mucous coat of the bowels even to mortification, without inducing uterine action.

Ulceration of the uterus; a case of superficial ulcer cured by horizontal posture, farinaceous food, diluted ointment of nitrate of mercury, cold water lavements, and the *secale*. Importance of distinguishing simple and malignant ulceration; and instances related in which the former degenerated into the latter.

Polypi and tubera; instances mentioned in which different kinds of tumours were coexistent. Some tumours forming within the substance of the uterus have proceeded inwardly and carried the mucous lining with them. Polypi considered as morbid growths from the mucous membrane. The same growths essentially may

vary in their appearance from constitutional peculiarity—and the different methods of removal modify the apparent character.

Uterine excitement; shewn to be a fruitful source of disease in the young female. Cases of leucorrhœa—paralysis—chlorosis—and of painful affections of the joints, from this cause, related. Many of the affections were relieved by cupping and blistering the loins, followed by steel medicines—others only by marriage.

Ovarian cysts; instances of the canula's being left in, and the fluid drawn off daily, terminating in the gradual failure of the vital power. Other instances of high irritation and inflammation, from injecting the cysts, whether with stimulating solutions, or with the fluid just drawn off.

Bladder; cases of catarrh, in which the *pariera brava* was useful. Case of ulceration of the mucous coat, in which there was excruciating suffering as soon as urine dropped into it. The mucous coat eroded to a great extent, and pouches or sacculi formed between the muscular fibres. In another instance of malignant ulceration, the coats at one part were totally destroyed, but effusion was prevented by adhesion to the pelvis.

Gonorrhœal rheumatism; a case in which gonorrhœa alternated with affection of the synovial membranes—quinine, and liquor opii sed. being found the best remedy.

Testis irritable; on this exquisitely painful form of neuralgia, numerous communications have been made. In some cases it was believed to be connected primarily or secondarily with disease in the spine, and cupping was beneficial. In one case quinine and sulphate of zinc, with opiates, appeared useful; three of the patients compelled the surgeon to remove the testis. In one of them the disease occurred in the remaining testis—and in another there was pain at the divided end of the cord. The extirpated testes were carefully examined, but no trace of disease was discover-

able. Almost every remedy had been found useful for a time ; but the most permanently useful in other cases were calomel and opium, and change of climate. It was mentioned as an important anatomical fact, that there were no distinct nerves in the spermatic cord—that the nerves form a net work, and are distributed on the vessels like a coat—and that the white cords, usually supposed to be nerves, are tendinous fibres.

Miscellaneous Affections.

Eye ; a case of fungous disease in a child, æt. 3 ; which had presented the usual metallic appearance in the commencement.

A case of hæmorrhage following the extraction of the lens. The lens came well away, but the eye assumed a greenish hue, and then a rush of blood filled it. Clot after clot was removed, and the wound was kept from uniting—sloughing ensued, and the eye was lost.

Iritis from syphilis—case in which mercury used for its removal produced paralysis. Mercury considered the best remedy in the syphilitic iritis, and bark in the rheumatic.

Ear ; instances of deafness from foreign bodies. A boy passed a pebble into the ear—it became impacted, and could not be removed without injury. The suppurative process took place, and it fell out, but the boy is deaf of both ears. A shell introduced and remained two years pressing on the nerve of the face. It was removed by the action of vinegar. Other cases were related of foreign bodies remaining four years without detriment.

Neuralgia ; two cases of in the face, and the half of the tongue corresponding with the pain was furred, whilst the other half remained clean. Case affecting the heel, and of long duration, effectually cured by arsenic. Neuralgia of the spine supposed to be a frequent cause of constitutional disorder.

Chorea ; a case attributable to solicitude of mind, and cured by the gentle

action of mercury. Instances of its being a family disorder, without being ascribable to sympathy.

Artery ; wounds of in bleeding. Several instances related. The effects of this injury said to be secondary hæmorrhage—aneurism—aneurismal varix, and diffused aneurism. The wound being longitudinal in some cases it had healed by pressure. In one case a deep incision was made by a sudden bend of the arm. The wound was bound up, and a pad applied. During ten days there was no disposition to heal, and swelling took place in the course of the artery towards the axilla. At length hæmorrhage occurred. It was now ascertained that the artery had been wounded underneath and nearly divided. A ligature was applied to the upper end of the vessel, but the lower orifice bled freely. Another ligature was applied, and hæmorrhage ceased. Pulsation was distinct at the wrist the following day. Suppuration took place in the course of the brachial artery.

It has been already stated that cholera had undergone repeated discussions. The Council have not thought it necessary to cite the opinions expressed as to the Asiatic cholera. The following instances of English cholera, or of disease analogous to it, occurred last summer in London.

Cholera Morbus.—A woman drank a considerable quantity of porter after fatigue. She was seized with vomiting and purging—violent cramp ; prostration and cold perspiration followed—no reaction could be excited, and she died in thirty hours. A porter, after dinner of hashed beef and pickles, walked from home. He was seized with pain at the pit of the stomach—excessive prostration followed—and the means gave no relief. He was bled, and appeared better. The operation was repeated and thirty ounces were drawn. The blood did not coagulate, but looked like a mixture of pitch and dirt. He was deadly cold—had continued sickness,

and ejected matter like dirty gruel. He died—a patch of inflammation was found in the duodenum. A brewer, without obvious cause, was seized with symptoms of cholera. A practitioner who had been seven years in India, saw him, and considered it as precisely resembling Indian cholera. Intense pain at the pit of the stomach—action of the heart excessively enfeebled—great efforts at retching, and a gruel-like matter passed upwards and downwards—coldness of the extremities—and considerable spasm. During thirty hours he continued in great peril, and then began to amend.

THE

SPIRIT OF MEDICAL LITERATURE.

No. 2.

Monstrosities.

THERE is a bicephalous girl, born in the Pyrennees, very nearly resembling the child or children previously described as Ritta-Christina. The anatomical appearances are very similar in each, but in the Pyrennean monster, there is an appendix nearly in the median line of the pelvis, and which appears to be a protuberance of the integuments, where the vessels and crural nerves terminate. Another double child has been met with at Salies, in the department of the Lower Pyrennees. They are united by the pubic and ischiatic regions. A third is a case in which the child was born alive, and still living, with four inferior extremities. The fourth is that of a calf, born with two heads, and double fore-limbs.

GEOFFROY ST. HILAIRE.

Salicine and Populine.

Having found the bark of the aspen successful in intermittents, when M. Leroux's discovery of salicine was made known, M. Braconnot determined to examine it, and ascertain whether it contained a principle at all

analogous. In the course of his experiments, he discovered that it contained salicine. The acetate of lead is added to the decoction of the bark, and the colourless liquid, previously deprived of excess of lead by sulphuric acid, is then evaporated; towards the end of the process animal charcoal is added, and the boiling liquid filtrated, the salicine separates, and crystallizes on cooling. On pushing the experiment further, M. Braconnot has discovered another principle in the aspen. He added carbonate of potash to the mother water, from which the salicine had separated, when a white precipitate occurred, soluble in boiling water, and which crystallizes on cooling in very fine needles of a sweetish taste. He has called this populine.

Salicine is also to be found in the white and in the Greek poplar, but the black poplar and many other species of the same kind, some of the willows, the *salix alba*, *triandra*, *fragilis*, do not contain it, although they are considered to possess febrifuge properties; it is obtained most readily from the *salix fissa*, *amygdolina*, and *helix*.

Académie des Sciences.

Successful treatment of Hydrophobia.

The patient in this case had been bitten in the leg by a mad dog; the wound was cicatrized in fifteen days; on the twenty-fifth day symptoms of hydrophobia shewed themselves, such as morosity, loss of appetite, insomnia, furious delirium, redness of the face, dreadful cries, &c. The patient was bled to three pints, and caustic applied on each side of the larynx; ice to the head; small doses of a powder composed of musk, sulphuret of antimony, muriate of ammonia, and sugar, were given every half hour, and he also had glysters with valerian or laudanum. The symptoms improved under this treatment; caustic was then applied to the cicatrix. This treatment was pursued for four days, and leeches were also applied to the

mastoid processes. On the thirty-fifth day, the patient left the hospital perfectly cured. M. Ozanam of Lyons, to whom the case occurred, considers hydrophobia a spasmodic inflammatory affection.—*Academie de Medecine.*

We doubt very much that this was a case of hydrophobia.—Eds.

Lithotriety.

M. Martin, a German surgeon, residing at Bagdad, has performed the operation of lithotriety twelve times during the years 1827, 1828, in that city, as attested by the French agent. The cases were all successful with the exception of one, in which lithotomy was afterwards deemed requisite from the size of the calculus.

Changes occurring during the maturation of fruit.

The sap is changed into a viscid fluid, which circulates under the bark; this is called *cambium*. When it is too abundant, it is effused, part of its water evaporates, and it becomes gum. If the vital circle is not interrupted, the fluid traverses the branches, and the peduncle, arrives in the ovary, and constitutes the pericarp. In this passage it is partly modified; it appropriates to itself the oxygen of its water of composition; hence the malic, citric, and tartaric acids. As the fruit becomes developed, the pellicle thins, becomes transparent, and allows both light and heat to exercise a more marked influence. It is during this period that maturation commences. The acids react on the cambium which flows into the fruit, and aided by the increased temperature, convert it into saccharine matter; at the same time they disappear, being saturated with gelatine, when maturation is complete.

M. COUVERCHEL.

CASES OF POISONING

BY THE BERRIES OF BELLADONNA,
OCCURRING SIMULTANEOUSLY.

By A. L. KÆSTLER, of Vienna.*

A —, accompanied by a son nine years old, was walking one afternoon in the woods near Dornbach, when he perceived some of the belladonna plant, the black and brilliant berries of which he mistook for wood cherries; he sent his son to gather some, who eat a quantity, because they were of a sweet taste; he himself eat about ten, and carried home a quantity for his other children. Another son, five years old, eat a great quantity; the two daughters took less. They all went to bed in good health. Towards morning, however, the boys were somewhat convulsed, became delirious, and could scarcely be kept in bed. A physician, who was called in, made them swallow soap and water, and ordered coffee, which, however, they did not take. Towards ten, M. Kæstler was sent for, when he learnt the following particulars.

Soon after eating the berries, the father drank some white, new, acid wine; in the evening he vomited, and was then purged several times. In the morning he had a slight headache and stupor, and he every now and then had a momentary sensation of dragging in the abdomen. The youngest of the two daughters, who had eaten the fewer berries, and who had vomited during the night, suffered from headache and disordered vision; the pupils not much dilated. The other daughter had taken more, and not having vomited as her sister did, the symptoms with her were more alarming; severe headache with stupor, indistinct vision, very dilated pupil, progression unsteady, vertigo; pulse natural, tongue clean; with the boys, the symptoms of poisoning were

*Medicinische Jahrbücher des k.k. Oesterreichischen Staates.

in all their intensity ; extreme agitation, continued motion of the hands and fingers, seizing the bed-clothes or other objects, high delirium, only relating to gay and amusing subjects ; vision almost lost, but they were both attending to bodies which they believed they saw ; extreme dilatation and insensibility of the pupils ; eyes sometimes stationary, at others in motion ; spasmodic action of the muscles of the face, grinding the teeth, voice small and hoarse ; slight swelling on the left side of the neck, and burning heat in the œsophagus, (in the eldest of the boys) ; *a determined aversion to all liquids in both boys, and spasmodic symptoms supervened whenever it was attempted to force them to swallow* ; finally, great excitement of the genital organs, erection, and involuntary emission of urine. This assemblage of symptoms is somewhat analogous to *mania without fever*, for the vascular system was not at all excited, and the respiration was not accelerated. Some berries, which had not been eaten, and part of the plant, showed the nature of the poison taken. Two indications presented ; the first to remove the rest of the poison from the stomach, for the frequent belchings having a belladonna odour, showed that the stomach was not quite free ; the second, to remedy the accidents caused by its ingestion. As there were no symptoms of gastritis, an emetic of ipecacuanha, tartarized antimony, and squill was given in small quantities every ten or twelve minutes, until the desired effect was produced. The second indication was fulfilled by means of vegetable acids. The father and the youngest girl had no emetic, as they had merely a slight head-ache. Emesis was soon excited in the other daughter, and she speedily recovered, as well as her father and sister, by abstinence and the use of lemonade. The boys did not vomit until the emetic had been frequently repeated, when they brought up the remains of the berries mixed with mucus and bile. As deglutition was very painful,

vinegar and water was given every two hours in glysters, rubbed on the spine, and applied to the head. By these means the agitation diminished considerably ; the youngest boy slept a little during the night. The next day there was still some delirium, but considerably lessened ; they had many fœtid stools, containing parts of the berries. The day after they were going on well, with the exception that vision was indistinct and the neck felt stiff in the eldest : the intellectual powers were perfectly re-established.

ON PULMONARY TUBERCLES.

BY B. ALDIS, A.B. M.B.

PHYSICIANS, from the remotest time, have endeavoured to investigate pulmonary consumption. Hippocrates, and other ancient writers, speak of suppurating tubercles in the lungs ; hence, not only the nature but also the pathology of the disease was scrutinized at a very distant period. The great Morgagni, on the contrary (according to Dr. Kolk), who was celebrated for his most accurate and frequent post-mortem examinations, so dreaded the dead bodies of the consumptive, that he never touched them, not even in his old age, although he would add, that it might appear more cautious than necessary, yet it was more secure ; but he describes a triple species of tubercles, of which one is like pus, another like thick honey, but most, and these the smaller ones, are filled with steatomatous matter. Much remains to be learned respecting the nature of tubercles ; authors differ greatly both as to their constitution and cause. Portal thinks, that tubercles are degenerated lymphatic glands, originating from a scrofulous habit. M. Broussais attributes the complaint to inflammatory action in some structure of the lungs, and propagated to the lymphatic glands of the part. He conceives that tubercular matter may be deposited wherever lymphatic glands are present. Dr.

Alison has endeavoured to show that they are attributable to the formation of the scrofulous habit, and that in such cases they may be, and often are, the consequence of inflammation. Andral considers tubercles as the result of morbid secretion, proceeding either from inflammatory action or congestion. Baillie denies their glandular nature; M.M. Bayle, Laennec, and Dr. Baron oppose the inflammatory doctrine; Lorinzer denies that tubercles can be formed without inflammation; he concludes that tubercles arise in consequence of suppressed exhalation of the exhalent vessels. Dr. Kolk consents that a morbid secretion can exist without inflammation; thus the urine, bile, and milk very frequently degenerate; but a new body is formed in the formation of tubercles, which does not at all resemble exhaled vapour, but greatly assimilates coagulable lymph, the companion of inflammation. In an excellent article published in the *London University Magazine* for Nov. 1829, a supposition is made, that tubercle originates in chronic inflammation of the lung; which causes a deposition of matter at certain points in its different textures; that these points go on enlarging till they produce, according to some accidental circumstance, all the varied appearances met with in tubercles." It is also stated, that "facts have not yet been made completely to demonstrate it; indeed, they sometimes seem to contradict it." Our inquiries into the nature and seat of tubercles must be limited in consequence of the difficulty of observing the disease at its origin. Much has been written on the subject, still the field is open to future investigation, and it is to be hoped that more fortunate observers dispersing the perplexing hypotheses which at present exist may gain a clear idea of tubercular formation.

13, Old Burlington Street,

June 16th, 1832.

Medico-Botanical Society,

June 12th, 1832.

EARL STANHOPE in the Chair.

DR. SIGMOND read an essay by Dr. Rousseau, on the *ilex aquifolium*, the common holly, which gained the silver prize, awarded by the Council for the best essay on "the medicinal qualities and uses of any indigenous plant, which is not yet sufficiently known, or on new uses and applications of any other indigenous plant."

Dr. Rousseau considers the *ilex aquifolium* as a powerful febrifuge, and capable of replacing the cinchona bark. In making this statement, he depends on an experience of twenty years, relying also on that of many eminent medical men, who have given it a trial on his recommendation. There are twenty-five species of the holly growing in various parts of the world, but only one, the *ilex aquifolium*, indigenous to Europe, is at all febrifuge. Dr. R. after describing the botanical characters of the *ilex*, gives three processes for obtaining its proximate principles, which he names *ilicine*. We shall only notice the last of these; it consists in making an alcoholic extract of the leaves, which is to be dissolved in water, and afterwards treated with the subacetate of lead, sulphuric acid, and carbonate of lime, then filtered and evaporated; to the product alcohol is to be added, distilled, and the residue dried. This is the *ilicine*; it is not acted on by acids, except when the temperature is raised; neither alkalies, chlorine, nitrate of silver, hydrochlorate of platinum, acetate of potash, oxalates of potash or ammonia, do precipitate it; it is insoluble in ether, soluble in alcohol of 40° or 36°, and even in warm water. It is of a brown colour, and non-crystallizable. When heated in a platinum crucible it gives out carbon, and betrays the presence of an alkali, by

restoring the colour of litmus paper when reddened by an acid.

M. Rousseau has only made use of the leaves in his experiments, and these have been given in various ways—in decoction, in substance, in extract, the ilicine, and in injection; the dose of the ilicine is from six to twenty-four grains in pills.

Dr. R. then details several cases, which he conceives prove the febrifuge action, as well as sedative of the leaves on the spleen, liver, and pancreas, especially when the sensibility of those organs have been increased by the use of cinchona and its compounds. In these cases the various preparations enumerated have been fully tried, and, after a longer or shorter period, effected a cure. In the last case only was the ilicine tried. In this case there was great prostration of strength, pupils dilated, teeth covered with sordes, mucous râle in the superior lobes of both lungs, abdomen hot, urine scanty and red, pulse 110 to 120; six grains were given daily, increased gradually to twelve. The patient was cured in about three weeks, one hundred and ninety-eight grains of ilicine having been administered, besides some other medicines. Towards the conclusion of the essay, Dr. Rousseau gives a *catalogue raisonné* of sixty-five cases, treated by the ilex and its preparations. Of these, twenty-two were quotidian, twenty tertian, twenty quartan, one of an erratic type; that of the other two not mentioned.

Specimens of the powder and extract of the ilex and ilicine were on the table.

Earl Stanhope then made some remarks on the use of the guaco-juice in hydrophobia and rheumatism, after which the Society adjourned to the 26th of June.

June the 26th.

The following presents were announced as having been received:—Dr. Webster on the epidemic cholera; *Handbuch der Pharmacie* by Phillipp Lorenz Geizer, in three vols.;

Abhandlung über die Arzneikräfte den Pflanzen by Dr. Johann Heinrich Dierbach; *Flora Apiciana*, Ein Beitrag Zur näheren Kenntniss der Nahrungsmittel der alten Römer, von Dr. Johann Heinrich Dierbach, Professor of Medicine at Heidelberg; *Europäische Cerealeen in Botanischer und Landwirthschaftlicher Hinsicht bearbeitet*, von J. Metzger, with specimens of the corn.

Earl Stanhope then proceeded to read a letter from Mr. Brown of Edinburgh, on the Tormentilla and its value in dysentery; Mr. B. being led to conclude that it will prove equally available in the epidemic cholera. Specimens of the plant, and the vinous preparation employed by Mr. Brown, were presented at the same time.

Dr. Sigmond then proceeded to read part of an essay which he had prepared, on the history and uses of the cinchona bark, which appeared to excite considerable attention. Dr. S. added, that he had been induced to submit the essay in its imperfect state, in consequence of the unavoidable absence of Drs. Ryan and Clendinning, who were to have delivered lectures that evening. He hoped the Society would afford him, during the next session, an opportunity of reading the essay, when rendered complete in all its bearings, including the discovery, &c. of the salts contained in the cinchona bark.

A ballot then took place for the office of Conservator, and W. B. COSTELLO, Esq. was duly elected.

Mr. Iliff then proposed that the vinous preparation of the Tormentilla should be given to the members to try its powers. He promised to give it a fair trial, and report the cases at the next meeting of the Society.

The President observed that the preparation was at the service of the members, and likewise remarked that some bottles of the guaco-juice were also to be obtained by members of the medical profession, on condition of furnishing the Society with a report of the trial

which they had given the medicine. He added, however, that Dr. Hancock, who had examined the guaco juice, considered that it had undergone a material change, the acetous fermentation having taken place.

The Society was then adjourned to November next, when early notice of the days of meeting will be communicated to the members.

MEDICAL PLANTS.

(Continued from p. 676.)

AMYRIS elemifera (elemi tree; amyris Gileadensis, balsam of Gilead tree), Nos. 78, 79. *Linn.* Octandria monogynia. Order 1, class 8. *Juss.* Terebintaceæ. Sect. 2, order 12, of Dicotyledones. *Gen. char.* Calyx four-toothed; petals four oblong; stigma four-cornered; berry drupaceous. *Prep.* Ointment from the resin.

ANCHUSA tinctoria (alkanet), No. 26. *Linn.* Pentandria monogynia. Order 1, class 5. *Juss.* Boraginææ. Sect. 4, order 9, of Dicotyledones. *Gen. char.* Corolla funnel-shaped; throat closed with arches. *Prep.* Root only used as a colouring for oils or ointments.

ANETHUM graveolens (common dill, anethum faniculum, sweet fennel), Nos. 60, 61. *Linn.* Pentandria digynia. Order 2, class 5. *Juss.* Umbelliferae. Sect. 1, order 2, of Dicotyledones. *Gen. char.* Dill seed is oval; concave on one side, convex and striated on the other; brown, with a dull pale membranous expansion. The root of fennel is fusiform; the stem erect; leaves alternate, composed of depending linear leaflets; its seed resembles dill. *Prep.* Dill is used in aq. anethi; fennel in an oil, confection, spirit, and decoction; its seed as a carminative.

ANGELICA archangelica (garden angelica), No. 56. *Linn.* Pentandria digynia. Order 2, class 5. *Juss.* Umbelliferae. Sect. 1, order 2, of

Dicotyledones. *Gen. char.* Corolla equal; petals bent inward. *Prep.* Leaves, seeds, and roots tonic and carminative.

ANTHEMIS nobilis (chamomile; anthemis pyrethrum, pellitory of Spain). *Linn.* Sygenesia superflua. Order 2, class 19. *Juss.* Corymbiferae. Sect. 4, order 3, of Dicotyledones. *Gen. char.* Receptacle chaffy; seed naked; florets of the ray more than five. *Prep.* Chamomile flowers are used in decoction, infusion, extract, and oil. Pellitory is employed as a sialagogue.

ARBUTUS uva ursi (trailing arbutus, or bear-berry), No. 99. *Linn.* Decandria monogynia. Order 1, class 10. *Juss.* Boraginææ. Sect. 4, Order 9, of Dicotyledones. *Gen. char.* Calyx five-parted; corolla ovate; the mouth pellucid at the base; berry five-celled. *Prep.* Leaves in powder.

ARCTIUM Lappa (Burdock), No. 161. *Linn.* Syngenesia equalis. Order 1, class 19. *Juss.* Cinarocephalæ. Sect. 1, order 2, of Dicotyledones. *Gen. char.* Calyx globular; the scales at the apex with inverted hooks; the receptacle chaffy; seed-down chaffy, bristly. *Prep.* Seeds and roots diuretic.

ARISTOLOCHIA serpentaria (Virginian snake root, or birthwort), No. 174. *Linn.* Gynandria hexandria. Order 4, class 20. *Juss.* Aristolochiæ. Order 1, of Dicotyledones. *Gen. char.* No calyx; corolla monopetalous, strapshaped, ventricose at the base; capsule six-celled, containing many seeds, and inferior. *Prep.* The root is used in tincture and electuary. Infusion dissipates the oil in which the virtue of the plant chiefly resides.

ARNICA montana (mountain arnica), No. 167. *Linn.* Syngenesia superflua. Order 2, class 19. *Juss.* Corymbiferae. Sect. 2, order 3, class 10, of Dicotyledones. *Gen. char.* Calyx with equal leaflets; corollæ of the ray very often having five filaments without anther; the receptacle naked; seed-down simple. *Prep.* Used in powder as an errhine; is

also exhibited inwardly in powder and infusion.

ARTEMISIA abrotanum, southernwood; *artemisia santonica*, Tartarian southernwood; *artemisia maritima*, sea wormwood; *artemisia absinthium*, common wormwood, Nos. 162, 163, 164, 165. *Linn.* Syngenesia superflua. Order 2, class 19. *Juss.* Corymbiferae. Sect. 4, order 3, class 10, of Dicotyledones. *Gen. char.* Calyx imbricate; scales round and converging; corollæ without rays; receptacle subvillous, or almost naked; no seed-down. *Prep.* extract.

ASARUM maculatum (asarabacca), No. 105. *Linn.* Dodecandria monogynia. Order 1, class 11. *Juss.* Aristolochiæ. Order 1, class 6, of Dicotyledones. *Gen. char.* Calyx four-cleft, placed on the germen. No corolla; the capsule coriaceous and crowned. *Prep.* Powder.

ASPIDIUM ilix mas (male fern), No. 207. *Linn.* Cryptogamia filices. Order 1, class 24. *Juss.* Filices. Sect. 2, order 5, class 1, of Acotyledones. *Gen. char.* Fructification in roundish, scattered, but not marginal points; involucre umbilicated, and dehiscent, almost on every side. *Prep.* Root in powder.

ASTRAGALUS tragacantha (tragacanth), No. 152. *Linn.* Diadelphia decandria. Order 4, class 17. *Juss.* Leguminosæ. Sect. 6, order 11, class 14. *Gen. char.* Legume two-celled, or nearly so. *Prep.* Mucilage, powder.

ATROPA belladonna (deadly nightshade.) No. 38. *Linn.* Pentandria monogynia. Order 1, class 5. *Juss.* Solanæ. Sect. 2, order 8, class 8, of Dicotyledones. *Gen. char.* Corolla campanulate; stamens distant; berries globular, two celled, resting on the calyx. *Prep.* Extract.

AVENA sativa (common oat), No. 19. *Linn.* Triandria digynia. Order 2, class 3. *Juss.* Gramineæ. Sect. 8, order 4, class 2, of Monocotyledones. *Gen. char.* Calyx two-valved, many-flowered; the awn twisted on the back. *Prep.* Used for gruel, poultices, &c.

(To be continued.)

KNOWLEDGE OF CHEMISTS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

A LETTER, signed "a constant Reader" purporting to be a defence of chemists against your "tirades &c. &c." appeared in your last number. If the confessions made in the effusion referred to (which I believe emanated from an ignorant chemist,) did not involve a question of paramount importance to the public and profession, I should not attempt to drag it forth from the obscurity in which it and its author ought to rest undisturbed. Assurance and ignorance are seldom found apart, like the "Siamese youths," a separation cannot be effected without probably terminating the existence of both, and so obstinately tenacious are they of their situation, that "the constant reading" of what? Of the London Medical and Surgical Journal?!! has not succeeded in expelling them from the cranium of your correspondent.

He is "*surprised you have glaringly departed* from the principles you professed and practiced." Good modest man! no doubt he is!! the shock was sudden, and its effects instantaneous; the perplexity he is thrown into is evident, he forgets his situation, neglects to serve a customer with a dose of salts! and becomes suddenly transmogrified into an author!!! But the adage still holds good, "*natura expellas fauca licet usqui recurrit.*" He has an eye to trade, he takes the surgeon, the apothecary, and ignorant chemist, mixes them up, and amalgamates bodies distinct and different from one another. Your "tirades" and "charges of ignorance" he dissolves, decomposes, and precipitates. Having so far disposed of your leading article, and clated with success and self approbation, he is determined to shew, that so far from being "uneducated and ignorant" he "*is able and obliged to correct the prescriptions of medical men daily*"!!!

and for what purpose? Forsooth if a physician's prescriptions were not thus corrected by the chemist, "they would cause the death of a great number of people."!!!

Gentlemen, the liberty of the press I highly appreciate, I hail it as the greatest blessing a country can enjoy, but when its portals are thrown open and admittance given to the impudent declarations of the presumptuous and ignorant, it counterbalances the beneficial effects arising from its free agency. It may, however, no doubt be necessary to make room for these absurdities occasionally. It excites attention to evils, the existence of which, without such exposure, might long remain unnoticed; in the present instance this purpose is fully answered, and likely you anticipated such results.

Physicians and surgeons might not possibly be aware, that their prescriptions were liable to undergo transmutations in the hands of "the ignorant chemist," unless he voluntarily came forward and confessed his guilt; but there is a certain fatality peculiar to the wicked, if perchance their crimes for a time escape detection, they ultimately become their own accusers. "out of thine own mouth will I judge thee, *thou wicked servant.*"

What must be the feelings of the learned physician and surgeon, who have devoted the most valuable portion of their lives to the study of their profession, who with much patience and perseverance become intimately acquainted with the human body in a state of health and disease, who have industriously laboured to investigate the causes and consequences of the various evils which afflict mankind, and whose minds are occupied in judiciously administering those remedies which experience has proved best adapted to alleviate or remove his manifold sufferings; what I inquire must their feelings be, when they are told that the chemist is resolved to "act his part" between them and their patients, that *he* becomes the ruler of life and death. And at whose expense? At

his own? No no, he will take care he shall be paid, but most probably the prospects of the physician, and surgeon, ruined by his misconduct. This is a subject of primary importance, and deserving the most serious consideration. It is a lamentable reflection, that the medical man's success in practice, his credit and respectability, are thus liable to be assailed; it is not surprising that those remedies which are judiciously prescribed, and whose efficacy experience has confirmed, frequently prove useless, or probably detrimental, when mutilated, changed, or altogether omitted, as the caprice of an ignorant chemist, may dictate. I have had personal experience of such conduct by a chemist in Great Surry Street (very likely your correspondent); I have heard him comment on the prescription of a physician of great respectability, and give verbal directions to use the medicine differently from what the physician ordered.

I may hereafter recur to this subject, but I hope the noxious effluvia from the "ignorant chemist's" unscientific compounds may not hereafter offend the numerous respectable readers of your Journal. Commit him to the tomb of the Capulets, with the short inscription, "here lyeth to disgust, macerate," &c. &c. &c.

I am Gentlemen.

Your obedient Servant,

H. W. M.

June 18th, 1832.

HUMAN COMBUSTION.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

ON reading Part the Fourth of the *Encyclopædia of Practical Medicine*, I observed some very interesting cases of spontaneous human combustion, in an article by Dr. Apjohn. The following very singular case came under my own observation, during my apprenticeship in Wales, which I think worthy of record; should you consider it deserving in-

sertion in your valuable Journal; by so doing you will greatly oblige

Your obedient servant,

C. L. DEVOUARD.

Titchfield-street, London.

CATACAUSIS EBRIOSA.

THOMAS WILLIAMS a sailor, aged 38, who had for a long time used himself to drink a quantity of spirits, especially rum, was in a smuggling vessel, in the month of November, 1808, which landed in Aberforth, having several barrels of rum on board, which they managed to get on shore without discovery, and took them to an old house in the village, which they had previously taken for the purpose; when all was right they began, as they termed it, to enjoy themselves, and to partake plentifully of their bounty. This man, who had been noted for the quantity he could take (for, according to his companions, his usual quantum was two quarts of spirits daily), now took considerably more than he had been accustomed to. He became so exceedingly intoxicated, and laid in this state for such a length of time, that his companions became alarmed, and sent for a surgeon from Cardigan; he being from home, myself and the other apprentice attended for him. On our arrival we found him in the state described. After ascertaining the beverage he had been taking, the best antidote we could think of was oil; this we agreed to administer, I officiating whilst the other held the candle, it being late in the evening. As soon as the candle came in contact with the vapour arising from his body, to our great surprise, it caught light, commencing about the face, and extending throughout the whole surface of the body, burning with a blue flame. We being greatly agitated, thinking that we had set him on fire, thought it best to depart, first having thrown a pail of water over him to extinguish it. This only added fuel to the fire, it burning with greater severity. On our return we related to our master the circum-

stance, who at first could scarcely credit it. The next morning he and myself went to see this unfortunate victim. Upon our arrival we found only part of the being we went to see, for all the parts, excepting the head, legs, and part of the arms, were consumed. The ashes which remained were black and greasy, and the room in which it laid had a peculiar offensive smell. His shirt, which was of flannel, was not burnt, but charred; we ordered the remaining parts to be put in a shell. Two days afterwards, from curiosity, we again went to see if the remainder was burnt, but found it as before. There was no inquest. His companions, as well as those people who had heard of it, being at that time very superstitious, and knowing him to be a very wicked man, reported that the devil had come, set him a-light, and sent him alive to the shades below for his wickedness.

MEDICAL PRIZES.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

IN the last number of the *London Medical and Surgical Journal*, I find you have given an account of the distribution of the London University prizes. As six of these prizemen were certificate of honour men in Dr. Elliotson's class on the principles and practice of medicine, I have sent you a list of them.

The high name and well earned fame of Dr. Elliotson, as well as the importance of the lectures which he taught, elicited a strong and hearty contest in his class, which will appear manifest when I tell you they were *all* prizemen in other classes with the exception of one, and that one was an honourable exception, he being first certificate of honour man in Professor S. Cooper's class of surgery; such a thing did not occur in either of the other classes, and such a thing never

once occurred before since the University has been established.

I am, Gentlemen,

Your most obedient servant,

X. Y.

June 23d, 1832.

The prizemen and certificate of honour men in Dr. Elliotson's class. :—

1. Mr. J. Wearne, of St. Ives, Cornwall, gold medal.

2. Mr. John Storrar, of London, first silver medal.

3. Mr. John P. Wall, of Ross, Herefordshire, second silver medal.

4. Mr. P. Henry Chavasse, of Birmingham, prizeman in medical jurisprudence, first certificate of honour man in midwifery, &c.

5. Mr. W. K. Wright, of Bristol, prizeman in practical anatomy, &c.

6. Mr. W. Rayner, of Castle Moat, Lincoln, prizeman in anatomy, &c.

7. Mr. J. Bartlett, of Great Bedwin, Wilts, prizeman in practical anatomy, &c.

8. Mr. S. Godson, of Hook Norton, Oxon, first certificate of honour man in surgery, &c.

9. Mr. F. Taylor, of York, prizeman in materia medica.

10. Mr. R. Lanyon, of Camborne, prizeman in surgery.

DR. SEED'S REMEDY IN DISEASES OF
THE EYE.

*To the Editors of the London Medical and
Surgical Journal.*

GENTLEMEN,

IN returning my acknowledgments to you, for the candour and kindness with which you have noticed the antispasmodic remedy, which I lately recommended in all inflammations of the eye, and which has been equally successful even where the inflammation was accompanied by ulceration of the cornea or conjunctiva, I beg leave to occupy your attention a few moments, in relating its effects in two other diseases of a different description, namely,

glandular swellings, and tic douloureux.

From the effect, the antispasmodic had in discussing scrofulous swellings, I was led to conclude that scars arising from struma, may be prevented by the judicious, and timely use of this remedy, applied to those swellings; from my experience in such cases, I have found that a more stimulating application, than what is used for the eyes, may with propriety be applied to those swellings. The following is the formula I beg leave to recommend.

Sulph. ether. comp. ℥ss.

Arom. spir. ammoniæ. ℥ss.

Camphorat. spir. vin. ℥ij;

Liq. ammon ℥iss.

In two cases I have had, in which the inflammation of the eyes was attended with glandular swellings, these swellings gradually yielded to the antispasmodic lotion above given.

In tic douloureux, my patient has taken antispasmodics internally, both in the form of pills and drops; the aperient pill has the compound galvanum pill as one of its component parts; bitters, carbonate of iron, carbonate of potash, and carminatives, such as ginger &c. have been taken, and all acids, and ascendent diet avoided, and the antispasmodic lotion above described, applied externally to the affected part, and by inhalation by the nostrils. This patient, a lady, has had this complaint at different times for 13 years. The first time she applied the remedy it immediately removed the pain, which left the cheek and jaw, and fixed in a diseased tooth, and on applying lint dipped in the lotion, immediately ceased.

I was called in about a fortnight since, and she has been for these six days perfectly free from pain and head-ache.

I have the honour to be, Sir,

Your most obedient servant,

THOS. SEEDS, M.D.

37, Bedford Place, Kensington.

June 13th, 1832.

DR. GRESELY

ON A

NEW APPARATUS FOR THE TREATMENT
OF FRACTURES OF THE NECK OF THE
FEMUR, AND OF THE BODY OF THAT
BONE.

THE great difficulty met with in endeavouring to preserve in juxta-position the portions of the fractured femur, has caused, at different times, the invention of many bandages and complicated mechanical contrivances, which happily, since Désault's time, are almost all abandoned; some in consequence of the useless violence they exercise on the limbs, others on account of their complication, and the impossibility of using them in all cases. One only is now employed, which, indeed, is free from many of the faults of the preceding instruments, that is the apparatus for continual extension of Professor Boyer, made according to the principles of the more simple apparatus of Désault. Necessity has obliged Dr. Grésely to substitute a new process of his own invention, which he thinks should be preferred in all cases for the simplicity and efficacy of its action.

In Désault's method, the point of counter-extension was on the tuberosity of the ischium of the injured side, by means of a bandage applied obliquely in the groin, and attached to the superior extremity of the large outer splint, and of extension on the ankle, by a figure of eight bandage, attached to the mortise of the lower end of the same splint. It results from this that the efforts of extension and counter-extension, acting entirely on the injured limb, and on certain circumscribed parts of that limb, the pressure exercised by the bandage must excoriate the integuments, and even induce the formation of eschars. On the other hand, the two points not being perfectly in relation with the axis of the limb, reduction is often imperfect; besides, the nature of the extensor agents not having a sufficient solidity, the apparatus is frequently relaxed, and requires constant care on the part of the surgeon. In

order to avoid these inconveniences, and especially to prevent the injurious effects of extension, M. Grésely, imitating the practice of the Arabs, adopted by Petit, Heister, and Duverney, has chosen his *points d'appui* not on the body of the patient, which is liable to yield, but on a steady, unyielding body, the bedstead: By this means an advantage is obtained, not possessed by Désault's process, that of not compressing the muscles in the neighbourhood of the fracture, of not being obliged to exercise too great a pressure, whilst a powerful, continued, and direct traction on both portions of the bone is made, so as to keep the most indocile patient in a state of complete immobility.

Counter-extension, or rather the resistance opposed to the efforts of extension, is obtained by means of a large leather girdle fixed around the pelvis, and retained on one side by two wide leathers attached to it, and fastened, one on each side, to the top posts of the bedstead; on the other side, by two others passing under the thighs, counter-balancing the effects of the other leathers, and serving to keep the girdle invariably in its place. *Extension* is performed by means of a common gaiter with a wide sole, connected with an elastic band, which has two ribbons attached to it, and these are to be tied to a metallic rod rising from the foot of the bed.

The *girdle* is to be made of leather, covered with soft skin and well padded; it should be about an inch and a half thick, and six or seven wide; it is fixed on the pelvis by buckles and straps. The two leathers for the thigh are also to be well padded and covered internally with soft skin, about two fingers breadth, and fixed posteriorly on the lower edge of the girdle, leaving an interval of from three and a half inches to four between them. The end of these leathers is pierced with holes for the reception of the tongue of a buckle, fastened on the anterior surface of the girdle in such a situation as to correspond with the

inguinal ring, when the girdle is applied. At its superior edge are two similar leathers of the same breadth, and long enough to reach the head of the bed, where they are fixed to two buckles nailed to the bed-posts. Immediately below the attachment of these leathers are two others, parallel with the girdle, and which are directed backwards to be attached to the sides of the bed, in order to prevent the patient moving. The sole of the *gaiter* cannot be too wide; in its centre are two ribbons to be attached to the *metallic rod*, which should be about a foot and a half long, bent circularly in its upper third, and terminated by a knob; at the other end, an extent of about two inches should be flattened and pierced with four holes for the screws, which fix it to the bottom of the bed. The *elastic band* ought to have such a power as to be able to resist five pounds weight. The ends of this elastic band have ribbons attached, to fasten it to the sole of the *gaiter* and to the *metallic rod*.

Before the application of the apparatus, the buckles and rod should be fixed on the woodwork of the bed.

The girdle is first applied, a piece of flannel being interposed between it and the skin for the sake of cleanliness. Before the leathers of the thigh are drawn tight, small pillows or compresses should be placed under them. A linen bandage should be rolled round the leg and foot ere the *gaiter* is applied.

The apparatus being fixed, the fracture is reduced according to ordinary principles, and the limb kept thus reduced by affixing the elastic band to the metallic rod, giving the band a direction exactly parallel to the axis of the limb. Extension made in this manner will be gentle, continued, and uniform. As the limb elongates the elastic band contracts, and consequently the bandage does not become relaxed, as happens in the ordinary apparatus; nevertheless it is proper to tighten the band from time to time. The curb in the rod prevents the ne-

cessity of a cradle, as it will support the bedclothes.

This apparatus appears to M. Grésely sufficient, in most cases of fracture of the neck, or the body of the femur; nevertheless, in the latter cases, he advises the use of the eighteen-tailed or rolled bandage.

This process will not always prevent the formation of eschars on the heel, but it may be avoided by raising the limb somewhat, and fastening it, thus raised, to the metallic rod. M. Grésely observes, that it is also necessary to increase extension gradually, until the limb shall be at least half an inch longer than natural, otherwise when the patient began to walk, the limb would shorten, its elongation being only apparent and dependant on the separation of the articular surfaces of the knee and ankle joints. Experience alone can decide on the soundness of this opinion.

This apparatus has but one fault; it cannot be met with every where, and cannot be applied in all fractures, or in all places. It will also most certainly spoil the bed to which it is applied, unless one is had for the purpose. It appears especially applicable in oblique fractures of the body of the femur or of its neck, where there is extreme tendency to displacement, or in indocile patients, or deprived of reason, or attacked by convulsions during treatment. Velpeau has several times employed this apparatus with success at *La Pitié*. A woman, 64 years of age, has just left its wards, cured of a fracture of the neck of the femur, after employing this mode of treatment for fifty days. The limb is not at all shortened.

Bulletin gen. de Thérapeutique.

[We have given insertion to this Essay in the present number, in order to place it in juxtaposition with M. Dupuytren's more simple plan of treatment in somewhat similar cases. Our readers will thus be enabled to compare the two methods, and judge for themselves.—Eps.]

An Historical Sketch of Lithotrity.

By M. LEROY D'ETIOLLES.

M. LEROY has published several tables in the *Bulletin des Sciences Medicales*, containing an historical sketch of the progress of Lithotrity from the earliest ages to the present time. According to him, Albucasis, or Alzaharavius, speaks of the breaking of the stone in the bladder, the calculus not being retained in the grasp of any instrument. He appears to allude to it in the following passage, which is extracted from the *Liber Theoricæ necnon Practicæ*, in quarto, p. 94, 1519:—"Arcipiatur instrumentum subtile quod nominant Mashaba rebilia et suaviter intromittatur in virgam et volve lapidem in medio vesicæ, et si fuerit mollis pangitur et exiit, si vero non exiverit cum iis quæ diximus oportet incidi," etc.

Next to Albucasis we find Alexander Benedictus, who, after dwelling on the medicines given to dissolve the stone in the bladder, says, "Cum verò his præsiidiis lapis non comminuitur, nec ullo modo eximitur, curatio chirurgica adhibeatur; et per fistulam quâ prius humor profusus dolores levent aliqui intus sine plagâ lapidem conterunt ferreis instrumentis, quod equidem tutum non invenimus. Nunc inter anum et colem rectâ plagâ cervicem vesicæ incidunt," etc.

Houin of Dijon mentions a monk of Cîteaux, who broke a stone in his own bladder, by passing a small chisel through a canula to it, and striking it with a mallet. Marcet narrates a somewhat similar case in his work *On Calculous Disorders*. The patient and operator in this case was Major Martin of Calcutta, who reduced his calculus to powder by the action of a small file, which he passed through a catheter.

We come next to those writers who have described instruments for the purpose of seizing and breaking up the calculus in the bladder; and

the first of these is the great Haller, who, in his *Biblio. Chirurg.* T. L. p. 313, when speaking of Sanctorius, thus expresses himself:—"Catheterem delineat trifidum, per eum in grandio rem calculum specillum sagittatum immittit es ut putat calculum dividit ut fragmenta inter specilli crura cadant et possint extrahi, (speculationem puto meram)." M. Leroy observes that Haller has mistaken Sanctorius on this point; he says that the last-mentioned author has only described an instrument for the extraction of small calculi, and not for the breaking up and subsequently extracting large ones. Not having Sanctorius's works by us at present, we are not able to ascertain the correctness of this assertion; but, if it be true, the whole merit of the discovery of lithotrity belongs to Haller, as he most decidedly mentions an instrument for the breaking up the calculus, and extracting the fragments.

Next to him comes Gruithuisen, to whom erroneously, it should seem, the Russians attribute the whole merit. He describes a large straight catheter for the purpose of breaking the calculus, fixing the stone by iron wire. He also speaks of perforation by the crown of the trepan, and mentions the bow and handle as motory instruments. He published in the *Saltzbourg Zeitung* in 1813. M. Leroy condemns his apparatus, as not being applicable to the purposes for which it was intended. He also condemns, for the same reason, the instrument of Eldgerton, described in the *Edinburgh Medical Journal* for 1819, consisting of two articulated branches, which fix the stone, while a file acts on its external surface by motion from before backward. We do not see why M. Leroy has thus decried Mr. Eldgerton's instrument, which we should conceive applicable, more especially if the file were one of the branches.

In 1821, Leroy d'Etiolles invented a curved instrument, with four springs to fix the stone, rotation being given to the drill, in spite of its bend, by

means of a flexible stalk, in the part where the bend occurs. This instrument was not made public until the year 1825, in the *Exposé des procédés pour guérir de la pierre*, p. 136: it was never tried. In May 1822, Amussat invented a straight forceps, with a double vice, to crush the stone, alternate pressure and friction being produced by (*encliquetage*): never applied. About the same time Leroy brought forward a straight instrument, with four watch-springs, sliding in grooves, and forming two cross arches, with a cylindrical drill and a handle: never applied. In April, 1823, he introduced an instrument with three elastic branches, reunited in a hollow canula, the hooks bent so as to recover themselves, a drill worked by the bow, double and eccentric drills, leathers fixed to the end of the canula to prevent the exit of the fluid; instrument for crushing the fragments by means of a screw. This instrument, Leroy says is the base of nearly all the rational modifications since proposed. In June, 1823, Civiale proposed an instrument with four branches, having a drill, with a head to be rotated by the fingers: never applied. Luckens of New York, in 1824, described an instrument somewhat resembling that of Leroy's of 1822, which was tried unsuccessfully. In 1824, Civiale brought forward an instrument with three branches, a drill with a head, and spiral springs, to ascertain the progress of the drill. In a note Leroy observes, that Civiale performed the first operation on a living patient, but not with the instruments which he describes, but with the instrument with three elastic branches of Leroy, somewhat modified. In 1825, Leroy again devised some modifications of these instruments, and Weiss invented a bent instrument, with a double vice and a saw, to divide the calculus by a motion from before backwards. In 1826, Heurteloup brought forward an instrument with four branches, which can be worked separately, with a cylindrical articulated drill; rectangu-

lar bed: instrument applied successfully. Meyrieux, in 1826, introduced an instrument with six elastic branches, attached with silk, one of them capable of being retracted, with a cylindrical drill, having pieces articulated to it: applied unsuccessfully. In 1827, Civiale again took the field, with an instrument for crushing the stone, having two branches, the one fixed, the other moving on the first by an alternate motion given by a wheel set in action by a handle. This appears to be the principle of the instrument Heurteloup lately described at the Royal Institution. Leroy, in 1827, exhibited another instrument; the principal point appears to be a hand-drill, which was used successfully. At the same time Amussat made known another instrument, which was also used successfully. The next year the *brise-coque* was introduced by Heurteloup, and an instrument for crushing the stone by alternate motion and pressure always increasing: successfully applied. Two instruments were also brought forward by Leroy, and used with success. Heurteloup and Segalas also introduced a *speculum vesicæ*; that of the first being a double glass tube, having phosphoretted oil in it to illumine the bladder when distended with air; of the latter, a reflector tube to direct the light of the lamp to the interior of the bladder. Pecchioli, in 1829, invented a drill, inclining laterally by means of an articulation. He published his observations in the *Annali Universali di Medicina*, gennajo, marzo, 1829. After this, during the year 1830, lithotrity engaged the attention of Pravaz, Rigal, Leroy d'Etiolles, Fanchon, Pamars, Jacobson, Colombat, Sirhenry, Récamier, Greling, Charriere, and Dupuytren, all of whom made various modifications, more or less valuable, in the instruments then in use. Many of them, as those of Pamars, Jacobson, Colombat, Sirhenry, and Récamier, were never tried. The chief modifications were made in the drill and its application.

It will appear by this, that while M. Leroy takes all the merit to himself, he makes but very slight mention of Civiale and Heurteloup. Although it should appear that the French medical profession and public have very generally recognized M. Civiale's claims to that merit which M. Leroy very ingeniously ascribes to himself. We should be very glad to see an *examen raisonné* of the pretension of both claimants. Civiale is, however, the lithotrist of Paris, and was the first successful operator. He has nearly superseded lithotomy in France; and hence the opposition he encounters, we shall not state from whom, though we could do so if we pleased.

Counteraction viewed as a means of Cure, with Remarks on the Uses of the Issue. By JOHN EPPS, M.D. Graduate of Edinburgh, &c. &c. Renshaw and Rush. 1832. pp. 69.

IN this essay Dr. Epps has assembled a vast variety of facts regarding the utility of counter-irritation, or as he chooses to call it, "counter-action," and with considerable judgment; he justly regards counter-irritation as one of the most powerful therapeutic agents we possess, and also as the one that can be more extensively employed than any other. He commences with a definition of the term counter-action, and an explanation of the practical utility of that principle. He then proceeds to describe what he calls "spontaneous counter-action," viz. when severe disease in the system is lessened or removed by the appearance of another in an organ less important to the preservation of life: after which we have accidental and intentional counter-action dilated on; the former being accidents and injuries inflicted on parts remote from the diseased organ; the latter, the application of liniments, ointments, plasters, stimulating poultices, blisters, escharotics, mechanical irritants, &c. &c. the whole occasionally illustrated by cases. Next follows a physiological chapter on the

widely extended operation of the remedial principle of counter-action.

The author gives a luminous exposition of the important subjects on which he treats, and condenses much valuable information in a very small space. There is a great deal of originality, good reasoning, and instructive matter in this unpretending production.

THE

London Medical & Surgical Journal.

Saturday, June 30, 1832.

RAMADGE v. WAKLEY.

AND

RAMADGE v. RYAN.

The Times, Courier, Globe, True Sun, &c. have commented on the verdicts given in these cases, and properly insinuate, that either the verdict for a farthing, or that for 400*l.* is unjust. *The Times* remarks upon the mystery of a man's character being estimated at a farthing on Monday, and at 400*l.* on Tuesday; and *The Courier* calls upon both juries to explain the grounds upon which they gave their verdicts. It is, therefore, manifest that the verdict on Tuesday overwhelms the public as well as the profession with astonishment. Every one exclaims, "You will of course have a new trial,"—not a doubt of it. We, however, abstain from all remark, as the most proper course for us to pursue who are so deeply interested in the matter.

The Profession have generously determined to support Dr. Ryan in this unequal contest, and the following Subscriptions to aid him to pay the

damages awarded by the jury on this occasion have been forwarded to Messrs. Renshaw and Rush, 356, Strand, where a book is open for the enrolment of the names of those who are willing to assist in this object:—

Dr. James Johnson ..	£10	10	0
Dr. Uwins	2	2	0
Dr. Tweedie	5	5	0
W. B. Costello, Esq. . .	5	5	0
A. C. Hutchinson, Esq. .	2	2	0
J. P. Holmes, Esq.	2	2	0
Greville Jones, Esq. . .	2	2	0
— Skey, Esq.	2	2	0
A Naval Surgeon	2	2	0
J. Foote, Esq.	1	1	0

ROYAL COLLEGE OF PHYSICIANS,

Monday, June 25th, the last Meeting of the Season.

A PAPER was read by the Registrar, which was furnished by Dr. Uwins, and entitled *Cursory Remarks on the present State of Medicine*. On the character or tenor of this communication we shall not at present enlarge, as we hope that in our next number we shall be able to present it entire to our readers.

Hospital Reports.

ST. THOMAS'S HOSPITAL.

Colica Pictonum.

JOHN HOLLAND, aged 30, of a plethoric habit, was admitted June 11th, into Jacob's Ward, under the care of Dr. Roots; states that he has been employed in a lead manufactory. About a month ago he began to feel

a disrelish for all kind of food, having a sensation of sickness, with a slight pain at the pit of the stomach. He continued for three weeks in this way, when he was taken with a violent sickness, vomiting of bile mixed with morbid secretions. This continued for some time, and every thing he took was soon returned; after this he had pain in the epigastrium, which at first was not constant, but after each interval returned with greater severity. At the time of his admission the sickness continued, vomiting acrid slime mixed with porraceous bile; the pain was now very severe, extending from the epigastrium to the navel, back, loins, and also down his thighs and legs; his abdomen was distended, and from the least pressure he suffered much pain; bowels costive, had not been open for seven days before he came in; had an anxious countenance, no appetite, pulse strong and full, between 60 and 70 in a minute.

Applicat. hirud. xxiv. abdom. statim.

Et postea baln. cald. R hydrarg. sub-muriat. gr. x.

Pulv. opii. gr. iv. conf. sennæ. q. s. ut ft. pil. statim sumend. ch. seq. ol. ricini ʒss. ol. terebinth. gtt. xx. 4tis horis sumend. Milk diet.

Eight p.m. His bowels have not yet been opened, he appears in great agony.

Enema terebinth. statim.

12th. His bowels have been opened during the night; was very restless in the early part, but towards morning, after his bowels had been relieved, he got a few hours rest. The pain however is still severe; cramp continues about his thighs and legs; pulse much the same as yesterday.

Rep. hirud. xx. abdom.

13th. Has passed a comfortable night; the pain about his stomach has greatly subsided; he experiences no pain from pressure; but owing to the severity of his attack, the whole of the external abdominal muscles are very sore: still however complaining of the cramp in his thighs and legs.

R Acid. sulph. dil. gut. xx. magn. sulph. ʒj. tinct. hyosciami gut. xx. aquæ ʒx. m ft. haust. 4tis horis sumend.

14th. May now be said to be in a state of convalescence; the soreness about the abdominal muscles nearly left him; the cramp about his legs greatly diminished.

Pergat in usu medicamentorum.

16th. The soreness and cramp have entirely left him; continues very weak.

Pergat.

MIDDLESEX HOSPITAL.

Abdominal Aneurism.

JOHN BURKITT, policeman, of middle stature, aged 28, was admitted into Pepy's Ward, under the care of Dr. Watson, May 31, on account of a tumour which he had at the pit of his stomach.

The account he gave of himself was, that he had formerly been a soldier, and that for twelve months last past, since he became a policeman, he had been troubled with a dull, aching pain in his loins, but within the last fortnight he had had great uneasiness at his stomach, and has perceived a lump there, with pain upon pressure, and which causes him frequently to be sick and reject his food. His bowels had also been confined lately, and he had felt considerable languor and debility. He was ordered, for the present, *hydr. c. creta gr. v. omni nocte et hirudines, viij. epigastrio.*

Upon going round the wards the next day, June 1st, a more particular examination was instituted by Dr. Watson, and the situation of the tumour more strictly marked. It appeared to have its seat between the superior and inferior mesenteric arteries; was about the size of a goose-egg, quadrangular in shape, hard and pulsating, bulging forwards the viscera and integuments under which it lay. Upon applying the stethoscope, it was observed that the *bruit de soufflet* of Laennec was distinctly perceptible, and upon comparing the pulsation of the tumour with the ac-

tion of the heart, it was found that it was not synchronous with the motion of that organ, while it was strictly so with the radial artery at the wrist, and also with the common femoral at the groin. The pulse at the wrist was beating about 80 strokes in a minute, full and rather hard. He complained to-day of considerable pain in the epigastric region, about the situation of the tumour, which prevented him from sleeping, for which he was ordered *gtts. xx. tinct. opii ex cyatho aquæ carui et hirudines, xij. tumori.*

June 2nd. Was much the same; bowels rather confined. Ordered *magnesiae sulphatis, 3j. in infus. menthae ter die.* In the same evening, same day, on account of an increase of pain, venesection to 3viij. was performed; *et gtts. xxx. tinct. opii ex aq. carui statim exhibend.*

June 3rd. Was seen to-day by Dr. Hawkins, who requested Mr. Mayo also to see him, and give his opinion on the case. Mr. Mayo desired the patient to turn on his right side, by which means he was able more clearly to define the tumour; upon the examination of which, he immediately gave it as his opinion that it was aneurismal. To-day, on account of some languor and flatulence, he was ordered 3ss *sps. ammon. aromat. c. mistur. camph. statim.*

June 4th. To-day he is much the same, with the exception that his bowels are more regular. *Pergat in usu medicament.*

June 5th. On account of pain and insomnolency, was ordered *haust, salin. c. syr. papav. 3ij. sumend. omni nocte.*

June 6th. About the same as yesterday, except that he is a good deal troubled with flatulence and griping pain in the bowels. *Pergat, et capt. pulv. magnes. comp. 3ss. ex aqua carui stat.*

June 8th. Had been worse yesterday; had had great pain in the back and shoulders, for which 3viij. of blood had been abstracted, and a draught given, composed of *tinct. opii 3ss. in*

mistur. camph. To-day he was seen by Sir C. Bell, who observed that the inguinal artery pulsated strongly, which was contrary to what he had generally found in the artery below the aneurismal tumour.

June 10th. Symptoms unaltered.

June 19th. From the last date up to this period the symptoms of pain and chylopoietic irritation have been about the same. An additional symptom of an almost constant desire to make water, has, however, since then arisen; he has become weaker from confinement, and is rather thinner. The tumour has increased in its lateral diameter, and from his having become thinner, it is more definable.

A further report of the proceedings of this case will be published as soon as any change of particular interest takes place.

Case of Adder's Bite.

William Morgan, aged about 30, was admitted at two o'clock P.M. on Friday, the 8th June, 1832, by the House Surgeon, under the care of Mr. Mayo, for a bite by an adder on the dorsum of the middle finger of the left hand, which he received at Norwood the previous evening (Thursday) while engaged in his usual occupation, viz. that of catching snakes. He stated that he did not feel much pain upon being stung, the incision being like the puncture of a pin; but in an hour or two his hand began to swell, got red and painful. He did nothing to it until admitted into the Hospital, when he was ordered to bed and a cold lotion to be kept constantly applied to it, and an opiate to be given at night.

Saturday, June 9th. He slept well during the night, and is upon the whole better to-day, but he complains of some pain and uneasiness in the axilla; the lotion was ordered to be continued, and the antiphlogistic regimen to be adhered to. There was a partially ecchymosed appearance all up the front of the fore arm, and upon making a little pressure upon

the back of the hand, he complained of tenderness; his tongue was to-day rather coated with a layer of concrete mucus, and the pulse rather full; but still it could not be said upon the whole that there was much of either vascular or nervous excitement. Mr. Mayo observed that the poison infused by the sting of the adder had not taken the course of any particular set of vessels; that it had not travelled in the line of the absorbents, but had rather become diffused throughout the superficies of the arm, through the medium of the cellular membrane. Mr. M. further observed that this kind of poison acted differently to that of the virus received by dissecting wounds, and that it presented in its action some features of particular interest.

Monday, June 11th. He is better to-day, but the tenderness and irritation has not entirely subsided;—*contin. remedia.*

Wednesday, June 13th. Going on well; the soreness and pain about the axilla has gone off;—*pergat.*

Saturday, June 16th. Is convalescent.

Discharged cured on the following Monday.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

SECRET REMEDY FOR INCIPIENT CATARACT.

A GENTLEMAN, of the name of Marshall, is trying at present the effects of a remedy, the composition of which he keeps a secret, at this Hospital, in cases of cataract, where the disease is not far advanced. The medicine is in the form of a liquid, of a peculiar colour, and its odour resembles that of decomposing cabbage water. This is dropped into the eye twice a day, with the effect of producing inflammation, sometimes to a severe degree, and frequently causing a purulent discharge. It has not yet had a sufficient trial, to enable

us to speak decidedly concerning its remedial powers. It should seem that it is intended to act, by exciting great inflammation externally, and thus relieving the low degree of internal inflammation, on which cataract is said frequently, if not always, to depend.

ST. MARY-LE-BONE DISPENSARY,

Case of Tic Douloureux.

ANN JOHNSON, ætat 28, re-admitted May 18th, 1832. Her case was recorded in a late number of this Journal, when a cure was effected by the sulphate of quinine. The pain re-occurred on Friday the 12th, at seven in the morning, and continued till two; it has appeared every day since, the period of its occurrence varying almost every day. Pulse regular, bowels costive, tongue rather furred; the pain is darting, very severe, less in the cheek, none at all in the head, integuments not tender.

Pulv. purgans ad sedes.—postea.

Sulph. quinin. gr. ij bis die.

17th. Is considerably improved. She has not had a return of the pain to day—Pergat.

22. The pain returned again on the 20th, and is very severe. Bowels costive. *Pulv. purgans, postea. Sulph. quiniæ.*

24. The pain shoots more towards the ear and cheek.

Applic. hirud vj. Emp. lyttæ pone aurem.

Rep sulph. quinin.

26. The pain has nearly gone.—Pergat.

29. Free from pain.—Rep.

June 14. Has remained free from pain. Discharged.

HOPITAL DE LA MARINE, MARTINICA.

Extirpation of the Shoulder.

FRANÇOIS BOYER, of Marseilles, 19 years of age, a sailor on board the Emile, on the passage from France

to the Antilles, fell, during the night, from a hammock on a chest, and received a comminuted fracture of the inferior extremity of the humerus. There being no surgeon on board, he remained eight weeks without assistance, at the end of which time the vessel reached Martinica. No measures had been adopted to lower the inflammation. Various abscesses had formed and opened externally, and the whole of the circumjacent cellular tissue appeared infiltrated with pus.

As soon as the vessel entered the road of St. Pierre, Boyer was admitted into the Hôpital de la Marine, under M. Lainè, D.M. There was at that period considerable fever, the shoulder was red, tumefied, and painful, with an abundant suppuration. Several incisions were made to allow a free exit for the pus, but without relieving the symptoms.

After remaining six weeks in the hospital, his constitution appeared so much weakened, that his life was considered in danger, and a consultation was accordingly held, when it was determined that exarticulation of the humerus presented the only chance of escape for the patient, which was accordingly performed the next day by M. Lainè. M. Lisfranc's directions were followed in operating. When the first flap was formed, various abscesses were opened into, and the tissue was so infiltrated with pus, that it poured out on every stroke of the knife; various fragments of bone were met with, and impeded the progress of the operation, which was nevertheless finished in four minutes. The parts were brought together, and in spite of their unfavourable aspect, the pus, in a short time, took on a more healthy character, and diminished in quantity, while the health of the patient improved so rapidly that in six days he was able to walk about unsupported.

During the progress of cicatrization, an abscess formed near the acromion, and gave passage to some knots of charpie. The patient recovered.

HOSPITAL PATIENTS.

THE number of patients at St. Bartholomew's Hospital last year was 5,275 in-patients, 7,458 out-patients, and 15,137 casualty patients, many of whom were supplied with money, clothes, and other necessities, to enable them to return home. At St. Thomas's, the number was 3,165 in-patients, and 20,627 out-patients, including casualties, making a total of 53,500 for the two hospitals.

On the detection of the Traces of writing fraudulently erased.

PROFESSOR GAZZARI, of Florence, having been frequently appointed by the tribunals to give professional evidence on trials of this nature, instituted experiments on the subject, which, by shewing him the possibility of removing not only the ink, but also the materials employed in its removal, proved that cases might arise when the fraud could not be detected in any other manner than by examining the condition of the paper or other material written on. For this purpose optical means were tried in vain, and immersion in water did not shew such a difference in the absorptive power of the written and unwritten parts, as happens in the employment of certain sympathetic inks; but on exposure of the inspected paper to a moderate fire, the paper which, in consequence of the corrosive effects of the ink, was in those parts altered in its nature, was unequally acted on by the process of carbonization, and thus the number and length of the lines, and often the whole of the erased portion were distinctly revealed.—*First Report of the British Association for the advancement of Science.*

Cinnamon.—The average quantity of cinnamon sold in the last seven years has been 4,570,000lbs., and the average price for the best has been 6s. 6d. a pound.

The cinnamon is peeled at a certain season by a class called chauliars, who are obliged to perform this duty in the forest, receiving a small fixed sum according to the quantity they deliver. Several of the inhabitants have of late made plantations of the tree, and cinnamon is received by the government in payment of land-rents. The wild cinnamon abounds in the forests of Malabar, and some plantations of the finer sort have also been lately made there. It is frequently mixed with the bark of the capia, which is occasionally sold in its stead. The quantity of cinnamon annually exported from Ceylon by the Dutch amounting to 180,000lbs., and which they procured at 5d. a lb., and sold at 11s. in Europe, has been raised to 920,000. Pepper, chiefly purchased from Malabar, is used to preserve the cargoes of cinnamon, by attracting moisture from the bales.

Strychnine in Hydrophobia.—Dr. Graves exhibited strychnine to a boy aged 12 years, affected with hydrophobia. Though very properly prepared, and tried in large doses, both by the mouth and skin, previously denuded of its epidermis, no effect was produced. The autopsy displayed nothing unusual in the tongue, pharynx, alimentary canal, or cerebro-spinal system.—*Dublin Journal of Med. and Chem. Science, May.*

Germination of Seeds caused by oxalic acid.—Oxalic acid has been of late successfully used to make old seeds germinate. They are kept in a bottle containing the acid, until germination commences, which generally occurs within 24 or 48 hours, when they are taken out and sown in the usual manner. Seeds from 20 to 40 years old have been successfully treated in this way.

London Medical and Surgical Journal.

No. 23.

SATURDAY, JULY 7, 1832.

VOL. I.

DR. RAMADGE'S ACTIONS FOR LIBEL.

COURT OF COMMON PLEAS.

Westminster, Monday, June 25th, 1832.

RAMADGE v. WAKLEY. *781*

BEFORE Mr. Justice BOSANQUET and a Special Jury consisting of the following Gentlemen:—

Benjamin Adams, Esq. Lower Homerton, Hackney, merchant.

Robert Henry Close, Esq. 10, Montague-square.

Charles Cooke, Esq. 45, Doughty-street, Pancras.

Abraham Cooper, Esq. 13, New Milman-street, Pancras.

T. Eldred, Esq. Highbury Terrace, Islington, merchant.

George Hadden, Esq. 15, Highbury Terrace, Islington, merchant.

John Hawkes, Esq. Upper Holloway, merchant.

Robert Mundell, Esq. Cheyne Walk, Chelsea.

Michael Oppenheim, Esq. Mansell-street, merchant.

John Rolls, Esq. King's Road, Chelsea.

William Thickbroom, Esq. Eaton-street, Hanover-square.

John Tracy, Esq. 10, Brudenell Place, merchant.

Counsel for the plaintiff, Mr. Serjeant Wilde, Mr. Serjeant Spankie, Mr. Adolphus, and Mr. White.

Counsel for the defendant, Mr. Serjeant Jones and Mr. Kelly; but these gentlemen did not plead in court, as Mr. Wakley defended his case in person. Plea—the general issue—not guilty.

Mr. Serjeant WILDE complained of a conspiracy in the medical profession to crush his client, because he had fearlessly stated his opinion, whether right or wrong, respecting Mr. St. John Long's practice; he contended that, however dissatisfied the mem-

bers of the profession might be with that opinion, it afforded them no excuse for endeavouring to ruin him in his private practice, and particularly by a gross and malignant misrepresentation of facts, such as this libel displayed. He complained that justice had not been done his client by the faculty, and contended that he was not less entitled to be fairly dealt by, because he was a regular and qualified practitioner, and did not advocate his own case in person.

“ Mr. WAKLEY entered upon his defence, and said it was a principle of law laid down by the greatest judges for the last hundred years, that a man coming into court to seek for damages should come in with clean hands. He would shew that Dr. Ramadge did not come into court with clean hands, as he had degraded himself by having been the advocate of St. John Long, and animadverted severely on the character of both, particularly the latter. He said that his publication had been open to strictures from correspondents on any species of delinquency in the medical profession; that the letter complained of had been first sent to Mr. Bradford, who did not deny the allegations in it; and that it was evident that the publication by him was to elicit truth. Dr. Ramadge had been a correspondent of his in *The Lancet*, and he would have an opportunity of reply, had he chosen that course, but his principal object was to extort money, by bringing a civil action for damages, and in such cases the liberty of the press would be a mere nullity, if infamy were to continue secreted, and quackery undragged to day and to shame. He knew not who wrote the letter, and scarcely hesitated to attribute it to Dr. Ramadge himself (*great laughter*), for the purpose of extorting money, if he (Wakley) had been determined not to compromise in order to prevent an action, or if he could blindfold a jury into a verdict for damages. But he trusted that the age of technicalities and of trumpet supported cases had gone, and that juries would be a shield for the just animadversions of the press on every species of infamy, physical

and political. He remarked on the absence of all testimony in favour of the plaintiff; but that of one single witness, *who* he said was interested, because implicated in the transaction, and he (Wakley) thought himself aggrieved because counsel for plaintiff did not produce the sworn evidence of Mrs. Reynolds, which the opposite side have in possession. He trusted his case in the hands of the jury, who he hoped would see that the plaintiff had failed to disprove any of the assertions in the alleged libel, or to substantiate his own declaration."—*Ballot*, July 1.

The JUDGE in his charge said that the systematic mode of treatment in general, or pursued in a specific case, was a lawful subject for fair criticism intended to improve science; but that an attack upon the character of an individual, so as to degrade him in society, and depreciate his prospects or property, was not. If the jury thought that the publication was meant as the subject of fair criticism, the verdict should be for the defendant; but if it was intended to degrade the individual rather than fairly to criticise, the plaintiff was entitled to their verdict. He then recapitulated the evidence very minutely.

The jury having consulted for a few minutes, inquired whether nominal damages would carry costs, to which the court replied in the affirmative; they again deliberated for a short time, and brought in a verdict—*Damages—One Farthing.*

Mr. Wakley then applied to the Judge to refuse his certificate for costs, but the application was unsuccessful.

RAMADGE v. RYAN AND OTHERS.

Tuesday, June 26th, 1832.

Before Sir N. TINDAL, Chief Justice, and the following Special Jury:

- Charles Devon, 35, Queen-square, St. Andrew's, Holborn, Esq.
- Gerard De Visme, 6, St. Andrew's Place, Mary-le-bone, Esq.
- Thomas Howard, Cottage Place, St. Luke's, merchant.
- Thomas Harding, James-street, Westminster, Esq.
- John Minter Hart, 19, Mornington Crescent, St. Pancras, Esq.
- George Kilgour, 25, Woburn Place, Esq.
- Richard Charles Kirby, 18, Alsop Terrace, Mary-le-bone, Esq.
- John Pinder, 10, York Gate, Mary-le-bone, merchant.
- Philip Samuel, 1, Bedford Place, St. George's, and St. Giles's, Esq.
- Robert Wilkinson, 41, Montague-street, Mary-le-bone, Esq.
- Deane Franklin Walker, 1, Gloucester-street, Mary-le-bone, Esq.
- Andrew V. Kirwan, 73, Gloucester Place, Mary-le-bone, Esq.

Counsel for plaintiff as in the preceding case.

Counsel for the defendants, Mr. Serjeant Taddy and Mr. Erle.

Attorney for the plaintiff, Mr. Williams, Ely-place.

Attorneys for the defendant, Messrs. Clutton and Fearon, Crown Office Row, Temple, and Borough.

This was an action for a libel, in the *London Medical and Surgical Journal* of September 1, 1831, against Dr. Ramadge (copied from *The Lancet*) the publication being edited by Dr. Ryan, and published by Messrs. Renshaw and Rush.

An offer was made by plaintiff to take a verdict for 40s. with costs, but defendants were advised to refuse this proposal.

The defendants pleaded—1, the general issue; 2, a justification of their statement.

Serjeant WILDE observed, that the plaintiff was a physician of considerable talent, and because he had given a voluntary and unbiassed opinion in favour of an undiplomaed gentleman practising medicine successfully among the most elevated ranks in life, not strictly in consonance with the principles and practice of the medical monopolists, he was opposed and abused by the faculty; but the age of prejudice and bigotry was over. His client had been successful in practice, notwithstanding the slander privately and publicly circulated against him, and intended to blast his reputation, and destroy his practice. From these slanders he selected the present libel, which contained strictures on his general character, and on his practice also,—strictures wholly uncalled for, unwarranted, and unjustifiable. They were partly copied from *The Lancet*, but far exceed the libel in that journal in malice and falsehood. A considerable time had elapsed between both publications, and therefore the defendants might have ascertained the truth of their statements, if candour and fair criticism were their object, or that they had intended to promote the interests of science, and not to direct a meditated attack upon an individual. In this case none of the topics about the liberty of the press can come under notice, except indeed one portion peculiar to the present day—the denunciation of the character and conduct of individuals by editors, who may be actuated by motives of personal enmity, or professional intrigue. The medical editors prescribed the rule of conduct for the whole profession, and denounced all who violated it. The present libel was published in consequence of the plaintiff's sanction and approval of the practice of Mr. St. John Long; but as this was new, it excited the jealousy and hostility of the faculty, who, on all occasions, opposed every thing novel, however valuable, as was illustrated in the instances of Mr. Harvey and Dr. James. But that a physician was to be denounced by his brethren for having ventured to examine

candidly the new practice, was not to be tolerated in this age. Such, however, was his client's case, for, having published a letter in favour of Long in *The Sunday Times* of the 10th of April, 1831, the faculty had conspired to ruin his practice and injure his character. Among these attacks was the present libel, which was evidently from the pen of a hostile practitioner, and was a notice to all of the faculty among whom his periodical circulated, that they were not to exercise their own judgments, or impartial opinions, upon any case contrary to the dictatorial decision of the faculty; that they should not support any man not legally qualified, although fully accomplished by his own knowledge and skill. The libel was printed in roman and italics, and set forth the monstrous falsehood that the patient recovered, under a treatment opposite to his client's, when, in fact, she had died three days afterwards. He would convince the jury that a gross attack had been made by the defendants upon the professional character of his client.

Mr. Williams, attorney for the plaintiff, proved that he had purchased the *London Medical and Surgical Journal* for September 1, 1831, in which the libel appeared, from the defendant *Mr. Rush*, and had called on the defendant *Dr. Ryan*, who acknowledged he was editor of the publication.

Cross-examined. *Dr. Ryan* said he did not impute any want of skill to plaintiff, and was ready to make any apology *Dr. Ramadge* required. He said he had apologized in the succeeding number for October. This interview took place on the 6th or 7th of October. He produced the succeeding number, and turned to an article, which he said contained the apology to *Dr. R.* and desired me to read it, which I did, and told him that it appeared to me to make the matter ten times worse. I remember that he said he copied it from *The Lancet*, and that no contradiction of it had appeared on the part of the plaintiff between the interval it had been published in that work and *The Medical and Surgical Journal*. I told him there did not, and that the plaintiff would let himself down very much by answering it. *Dr. Ryan* observed he was willing to insert in his *Journal* any thing the plaintiff desired.

Mr. Bradford, a surgeon-apothecary in Fleet-street; *Miss Bullock* was my patient in July, 1831; called in first about 15th July, Friday; had attended her two or three years before for an inflammatory fever called synocha. In July last she had same complaint, only more violent in degree; prescribed two calomel pills, of four grains each, four aperient draughts composed of rhubarb and mint water; twelve leeches to the temples. Plaintiff saw her for me on Saturday, 16th; he was attending another patient in the neighbourhood; he attended whilst I was out of town; came back on Monday, 18th July; saw *Miss B.*; plaintiff prescribed on Sunday, 17th, twelve leeches

to stomach; on Monday, 18th, prescribed eight pills and four draughts, my own prescription; no leeches on that day. Tuesday, 19th July, saw her again, plaintiff did not; he saw her again on Thursday evening, 21st July. In the interval she was under my care; *Mrs. Reynolds*, *Miss B.*'s sister, desired his attendance. Plaintiff at first attended as my friend; on Thursday attended as physician. I bled patient on Tuesday morning by plaintiff's direction; he might have called on the Tuesday; the leeches had not drawn at all. I took twelve ounces from the arm. *Mrs. Reynolds* said the leeches failed; the weather was hot and unfavourable to leeches, they had not acted. On the 21st, *Miss B.* had a great disposition to sleep; slept all day and night; obstinate costiveness, as the medicine had not acted; she complained of weight in head; plaintiff asked if she was bled, and was told she had been; he said that was right, and wrote a prescription for two calomel pills ten grains, conserv. of roses ten grains, both sent, one to be taken immediately, the other repeated if first did not act; lotion to the head; saline draught and antimonial wine. Friday, 22d, plaintiff saw her again; *Miss B.* passed a bad night; was violent and stupified by turns; she struck those about her. Plaintiff directed thirty leeches to be applied to her head and behind her ears; they failed. Then I opened one temporal artery; tried the right first, could not succeed, and I opened the left; I could get no assistance. I took a pint, or thereabouts; leeches take from half an ounce to an ounce each. Patient better; I was with her an hour and she fainted; and when she came to herself she was better; obliged to put her in an upright posture, and that made her faint. I directed the room to be kept cool particularly, as it was low, small, and intensely hot; bed nearly filled it, and desirous to remove every thing that could impede the circulation of air; windows opened. The artery was opened in the evening; saw her afterwards on that evening; very much recovered. Saw her four times on Friday. Plaintiff saw her again on Saturday, July 23rd. He saw her Friday evening; he was in the shop, and I asked him to go over. I saw her on Saturday with him; I found windows and doors closed. Bed-clothes increased in quantity; I made the strongest observations against it. I desired a curtain to keep the light from her eyes. They said wine and water had been given her. The inflammatory symptoms increased by stimuli given in night. Cold dash ordered to head. *Dr. Ramadge* directed mercury to be rubbed on legs, and opening medicines, 8 1-grain calomel pills, with some aperients in house. Saw her three times regularly every day; twelve leeches and a blister to back of head. Saw her on Sunday morning; she was slightly relieved by leeches. Saw her with plaintiff on evening of Sunday. Mercurial applications ceased on Sunday. I do not

find out any prescription for mercurial applications. Saw Dr. Tweedie and plaintiff there late in evening. An altercation took place between those gentlemen. There was a good deal of altercation; both gentlemen exceedingly warm. Dr. Ramadge and Tweedie quarrelling. I first heard plaintiff say, he came to consult for the patient's benefit, and Dr. T.'s conduct was very impertinent and very ill-timed. Dr. Tweedie said you are repudiated by the profession, or words to that effect; I heard this. Dr. Ramadge said, you are no gentleman, but I am by birth and education. You are * * * *. Dr. T. said he could not think of meeting Dr. Ramadge. Took me by the arm, and asked me, What did you bring me here for? Dr. T. said he was repudiated, that he was connected with Long, or had advocated him. He said plaintiff supped with Long. Dr. R. said I am entitled to my opinion as well as any other man, and your objection is exceedingly impertinent. The doctors consulted; a prescription was written by Dr. T. Parties met on Monday, July 25th. Plaintiff put his name to the prescription, I think; am not sure. Plaintiff said he regretted having written his name to sanction the exhibition of morphia. Monday worse; another prescription written by Dr. T. Dr. T. said it was no consultation, and said, tear off that fellow's signature. I declined, and Dr. T. did it himself. Plaintiff did not see patient after that, who was then exclusively in Dr. T.'s care and treatment. He observed, that it seems to me the bleeding is carried far enough. Leeches were again mentioned, and Dr. T. said, We will try a blister. A turpentine enema was administered; object not stated. The intention was counter-irritation. Dr. T. had in some respect departed from the previous treatment. Patient died on the Thursday, 28th July; in the afternoon. Patient better on the Monday, but worse on the Tuesday and Wednesday; on that day I looked for her death. Had good hopes of her on the Sunday afternoon.

Cross-examined.—The bleeding was not very profuse; I have often seen people bled twice or three times as much; 140 leeches were neither sent nor recommended; there were only two successful applications of leeches, those to the head and stomach. Mrs. R., finding the leeches did not succeed, sent out for more; she told me twice or three times so, and she said she had had no better success with those; put 12 to the temples on Friday; on Saturday, 16th, 12 leeches more were used; on Friday, 22nd, 30 more were ordered; on the 23d, there were 12 more. I endeavoured to open the right temporal artery; on that occasion I did not take a teaspoonful of blood; I did this on Thursday, 21st; I am not aware I bled her on that day; I believe I did on Friday, 22d; I opened the temporal artery; I took 16 ounces that day, a pint pot full, and a little ran over; she did

not bleed in the bed much; the blood sprinkled about the bed; I said let her bleed in the bed, but she did not do so; she fainted away; I was not much alarmed; thought it necessary to stay with her an hour; certainly I was not agitated or alarmed; apprehended that from want of assistance that I could not well secure the temporal artery; I did not believe she was dying; she was some time coming to; did not state she was dying, or any thing to that effect; I left her, and was well satisfied; I gave her two teaspoonsful of wine and water, and applied hartshorn to her nose. Up to this time depletion was pursued, and mercurial frictions and blisters were applied, and a glyster also. When Dr. T. was called in, patient had jellies, sago, arrow-root, and beef-tea, by Dr. T.'s orders, but she had all these before; I had not ordered beef-tea before; Dr. T. limited the quantity of beef-tea; she was ordered light nourishment, and she might have taken beef-tea; arrow-root and sago were ordered before by plaintiff and myself. Plaintiff put his name to a prescription for a turpentine enema; turpentine is a stimulant, and to her who was weak was a stimulant of more than ordinary degree. Plaintiff denied he had any connexion with Long, beyond what as a man of honour he ought to have; I do not know that any man had refused to meet plaintiff; I have seen him with Dr. Davies, and Mr. Lloyd; I have heard one or two medical men say that they would refuse; I do not know I have in any case refused to meet him, but I have not called him in so often as I did before, when it was stated that he was in connexion with Long, and I did not refuse to meet him, as plaintiff has denied the connexion. I have told him repeatedly he had lowered himself in his profession, and cautioned him against Long. I had a difficulty to pass the catheter; Dr. T. did pass it; do not describe myself as dealing in rapid remedies; my card states, "the most rapid cures effected on the most reasonable terms;" these cards not used; they were printed, as a rival establishment was opened in opposition to mine.

Re-examination.—The catheter was not requisite when it was passed; very little water drawn off; called in Dr. R. to Mr. Devine at same time; I sent poor people to plaintiff; I sent a servant of my own; Dr. T.'s treatment was following up plaintiff's in a minor degree; half the people who are bled faint; refused to give the prescriptions to Dr. Tweedie, gave them to Dr. R.'s attorney.

Libels now read.

"*Tweedie v. Ramadge.*—Dr. Ramadge was in attendance on a case of typhus; the patient, a young lady, was bled from the arm on a Friday, and *eight dozen* (96) leeches applied to the head and neck. On Saturday, both temporal arteries were opened; the patient fainted, and the apothecary, who was likewise in attendance, left her; the nurse

brought her round with wine and water. On the Sunday, another dozen leeches were applied, and immediately she became delirious, when Dr. Tweedie's advice was requested by the relatives.

"Dr. Tweedie having spoken apart with Dr. Ramadge, addressed Mrs. Reynolds, the sister of the patient, and said, '*That having attended the family before, he should be happy now to give his assistance to the young lady, but that Dr. RAMADGE'S CONDUCT IN A LATE CORRESPONDENCE WITH JOHN LONG, HAD BEEN SUCH, THAT NO MEDICAL MAN OF RESPECTABILITY COULD CALL HIM IN OR CONSULT WITH HIM, WITHOUT INJURING HIMSELF IN THE EYES OF HIS BRETHREN. That he (Dr. Tweedie) bore no private pique against Dr. Ramadge; he believed him, indeed, to be clever, but his character, as regarded the above transaction, rendered it imperative for all medical men to decline acting with him, and Mrs. Reynolds must, therefore, choose which she would entrust.* Dr. Ramadge replied in great anger, '*that he was a gentleman by birth, education, and profession, but that Dr. Tweedie was neither* * * *. Dr. Tweedie answered him by turning coolly on his heel, and walking out of the room. Dr. Tweedie was retained, and cured the patient by *exactly opposite treatment*. Dr. Ramadge, it is said, is frequently at supper with John Long."—*Lancet*.

"Dr. Tweedie has honourably and faithfully discharged his duty to his medical brethren, and we hope every one else will do the same. We are well aware who it is, and a medical man to boot, that makes the trio in these *family suppers*. Let him be warned in time: he takes upon him to defend this nefarious quack and man-slaughterer in the face of the whole profession; let him take warning, or we will not spare him.—ED."

Original Libel.

"RESULT OF UPHOLDING QUACKS.

"To the Editor of *The Lancet*.

"SIR,—The following account of a medical fracas, shows that your strictures against quacks and their coadjutors, are duly appreciated by respectable medical men. Ten days ago, Miss Emma Bullock, of No. 1, Gloucester Place, Old Kent Road, was attacked by a fever, which was declared to be typhus. The young lady was attended by Dr. Ramadge and Mr. ———, a medical practitioner in ——— Street. For some reason she was not bled until Friday, when a vein in the arm was opened, and eight dozen leeches to the head and neck were applied. On Saturday the temporal arteries were opened on both sides; she fainted, and the apothecary having left her, the nurse succeeded in bringing her round with tea-spoonsful of wine and water; and from a state of delirium she became rational, but very weak. On Sunday another dozen leeches

were applied; and immediately afterwards she became again delirious, when Dr. Tweedie's advice was required by the lady's relations.

"That gentleman on his arrival spoke to Dr. Ramadge privately, the purport of which may be guessed from what followed: Dr. Tweedie, in the presence of Dr. Ramadge and Mr. ———, addressed Mrs. Reynolds, the sister of the patient, and said, that having attended the family before, he should be happy now to give his assistance to the young lady, but that Dr. Ramadge's conduct in a late correspondence with John Long, had been such, that no medical man of respectability could call him in or consult with him, without injuring himself in the eyes of his brethren. That he (Dr. Tweedie) bore no private pique against Dr. Ramadge; he believed him, indeed, to be clever, but his character, as regarded the above transaction, rendered it imperative for all medical men to decline acting with him, and Mrs. Reynolds must therefore choose which she would entrust. Dr. Ramadge replied, in great anger, that he was a gentleman by birth, education, and profession, but that Dr. Tweedie was neither. * * *. Dr. Tweedie answered him by turning coolly on his heel and walking out of the room. It is needless to say, that after this Dr. Tweedie was retained. He ordered the instant cessation of mercurial frictions, of the tea-spoonsful of calomel, the draughts, pills, potions, powders, &c. A composing draught was given, and nourishing beef-tea ordered; lotions to the head, &c. were applied, and under this treatment the patient is recovering. "Who can decide when doctors disagree?" What can we poor uninitiated think of such opposite opinions? The names of the parties are stated in full, that the truth may be ascertained. I am told Dr. Ramadge is frequently at supper with John Long.

I am, Sir, your most obedient servant,

ONE."

London, July 28th, 1831.

Serjeant TADDY commenced his defence by observing, that he heard with no small astonishment the observation of his learned friend, Mr. Serjeant Wilde, on the danger of prejudice and partiality of a jury; but he hoped and believed that the day would never arrive when a British jury could be accused of either prejudice or partiality; for himself he was firmly convinced, that equal and impartial justice would be done his clients, and that the jury would give a just verdict, according to the evidence laid before them. This was all his clients wanted, strict and impartial justice. The article complained of had been extracted from another medical Journal, called *The Lancet*, in which it appeared in August, 1831, and was copied into the defendants' publication, *The London Medical and Surgical Journal* of the September following.

Dr. Ryan, the editor of the Journal, had expunged the most offensive passages in the original, such as the title, "Result of upholding quacks," the name and address of the patient, and the charge that the plaintiff had administered teaspoonsful doses of calomel. He added some comments, showing the propriety of the profession in refusing to meet the plaintiff in consultation, as he had forfeited all claim to professional respect; having advocated that nefarious quack and manslaughterer St. John Long. In his client's comment, he had not exceeded the limits of fair and candid criticism; and it was his duty, as a public journalist, to examine and criticise fairly and honestly the conduct of the plaintiff, as it was injurious to the dignity of the whole profession. The medical profession was the most dignified, enlightened, liberal, and useful of all the learned professions, not excepting that to which he had the honour to belong, and its respectability was not to be depreciated by the conduct of the plaintiff, who, in defending a notorious and convicted manslaughterer, and, at the same time, grossly defaming the most eminent members of his own profession, laid himself open to the censure of the faculty and to the severest criticism of the medical editors. "My learned friend has forcibly commented upon a passage in the alleged libel, in which my client has called St. John Long "a nefarious quack and manslaughterer;" but I am one of those who, notwithstanding the opinion to the contrary, am, and always was, convinced of the justice and legality of the conviction of that person at the Old Bailey. It has been urged on the other side, that my client was malicious in publishing the alleged libel; but I shall show you, that he copied it from *The Lancet*, and seeing no contradiction of it by the plaintiff, he was fairly at liberty to conclude, that all the statements contained in the article were true. He, however, discovered, that though the patient gradually improved under Dr. Tweedie's treatment, and was recovering, that she ultimately died; and accordingly, in the next number of his Journal, he inserted an apology to the plaintiff, and subsequently offered to insert any remarks the plaintiff thought proper, but the apology was not accepted, and this action is the result." His client would justify the statements made in the libel, and would prove that the plaintiff had improperly treated the lady, whose case was referred to in the article in his work, as he ordered depletion when he should have ordered stimulants and strengtheners, and that in consequence of his connexion with John Long he had been repudiated by the whole profession. Mr. Serjeant Taddy contended, that the interests of the public, as well as those of the medical profession, required that the honour and character of that profession should be sustained, and that the only object of the alleged libel had evidently been to do so, by holding up to

censure the conduct of one of its members, who had thought proper to countenance and approve of the system of a man who had presumed to practise medicine without the proper and ordinary qualifications for so doing, and who having thereby deprived two human beings of their lives, had been convicted in one of those cases of manslaughter.

Mr. Robert Reynolds deposed, that he was brother-in-law to Mrs. Sophia Reynolds, who was gone abroad.

Cross-examination of Mr. Reynolds. Was desired by his sister-in-law to write a note to plaintiff; that is the note.

Depositions of Mrs. Sophia Reynolds, taken before Thos. Hudson, Esq. the 13th, 14th, and 15th of March, 1832.

I AM the wife of Thomas Lamb Reynolds, and live at present at No. 32, Penton Place, Pentonville; my husband is now at New-York in America. I expect to join him there. I wish to leave England on the 25th of the present month; I know Dr. Ramadge, the plaintiff in this suit. Miss Emma Bullock was my sister; on the 13th of July last, I resided at No. 1, Gloucester Place, Old Kent Road. Miss Bullock resided with me, had she lived she would have been 22 years of age last August. On Tuesday the 12th July last, she returned from Battersea, to the Kent Road, not very well; on the next day, the 13th, she was not much better, but well enough to walk from the Kent Road, to Chancer Lane, and back again; on Friday the 15th July she appeared very ill; I sent for Mr. Bradford, the apothecary in Fleet-street, to attend her; he did not come till about 3 o'clock in the afternoon; he said my sister ought to be bled; he asked her if she had any objection to be bled in the arm; she said she would prefer not being bled in the arm if he could proceed without; he then ordered her leeches, which were applied, I think about a dozen; he ordered the curtains of the bed to be taken down as she had typhus fever; he sent some medicine with the leeches, which my sister took; she at that time complained of great pain in her head, but not of pain in her chest. On Thursday, the 14th July, I applied four leeches to her temples in consequence of her head being bad; I told Mr. Bradford of it, and he said I had done perfectly right, I ought to have applied a great many more.

On Saturday, the 16th July, Mr. Bradford called again; he said he was glad to see her better, and said my sister had not got the typhus fever, he said it was a violent bilious attack, and would prescribe a 10 grain calomel pill for her, which he directed to be given immediately; he wrote a prescription for it, which was sent to Mr. Paternoster's, a chemist opposite to my house, to make it up; he made it up, and my sister took it; Mr. Bradford said he would send a draught to be taken an hour afterwards, but which did not come for three hours after, and the patient

then took it. Mr. Bradford said her complaint was a violent bilious attack, that the medicine she then took would do her good, and that she would be well in a few days; he said he was going out of town, and that Dr. Ramadge, the plaintiff, a friend of his, would officiate for him during his absence. The pill did not operate, which alarmed me, and towards evening I sent a note to Mr. Bradford; the answer to which was that he was not at home. I then sent my sister Matilda Bullock to Dr. Ramadge, to inform him of the circumstance, and in the mean time Mr. Bradford's assistant sent some castor oil, which was to be given to the patient immediately, and which the patient took. Dr. Ramadge did not attend on this day; my sister Matilda, who went to Dr. Ramadge, brought back a powder with directions, which were in writing; she took the powder; I do not recollect whether leeches were applied; the patient's feet were put in warm water.

On Sunday, the 17th July, about three o'clock, the plaintiff saw my sister Emma, for the first time; I was present; I told him that none of the medicine had had the desired effect; the plaintiff said he was very much surprised at it, and ordered an enema to be administered directly; he said she ought to have been bled on the Friday; I asked him if it was requisite now, and he said yes; I thought he, as a physician, hesitated to bleed her, and I offered to send for an apothecary to do it if it was requisite; he said oh no, we will wait till Mr. Bradford returns; leeches will do as well; he ordered, I think, about a dozen leeches, which were applied to the temples by plaintiff's directions.

On Monday, the 18th July, Dr. Ramadge and Mr. Bradford came together in the morning; all the medicine and the enema had produced very little effect; Dr. Ramadge said, my sister was better, and would be well in a few days. Mr. Bradford said he would call in the evening, and he came accordingly; Mr. Bradford then bled her in the right arm; he took about three parts of a pint of blood from her; she did not faint, during the bleeding; she said it relieved her head considerably; she did not sleep at all during the night, she was very restless; she dosed a little, and complained much of her head; she said her head felt very light; before the bleeding she was heavy to sleep. After Mr. Bradford had bled my sister, he ordered some medicines, which she took; they were fever draughts and pills, and were taken every four hours.

On Tuesday, the 19th July, Dr. Ramadge called as a friend with Mr. Bradford to see my sister. Mr. Bradford, in Dr. Ramadge's presence, directed the same medicine to be continued; my sister was getting worse on the Tuesday.

On Wednesday, the 20th July, Mr. Bradford called in the morning; he said he considered my sister better; but as she complained of her head he ordered leeches to be applied; leeches were applied; I do not recollect the

number; she was not better from the application of the leeches; she was very restless during the night; medicines were administered to her.

On Thursday, the 21st July in the morning, my sister's head began to wander; Mr. Bradford saw her, and ordered a great many leeches, more than a dozen, but I do not recollect the number; Mr. Bradford saw her again in the evening, she was then worse and very delirious; he said she must lose more blood; I asked him whether he would not open an artery in the head; he seemed to hesitate; I asked him if Dr. Ramadge was with him; he said yes; he was in the chaise at the door; I then desired he might be called in professionally to my sister. Dr. Ramadge came and saw my sister. He directed Mr. Bradford to open an artery in the temple; Mr. Bradford attempted to do so and lanced the head in several places; he did not succeed in getting blood from the head. Dr. Ramadge told him he had not touched the artery, it was lower down, and he then pointed to the place where the artery was; Mr. Bradford said he was sure he had, but the blood would not flow, and as such he must bleed her in the other arm; my sister was very irritable, she rolled her head very much, and was delirious; Mr. Bradford bled her in the other arm; she was so very violent that my husband, Dr. Ramadge, and myself, held her whilst Mr. Bradford bled her in the arm; he took some blood in a basin, and then put her arm into the bed and let her bleed there; she forced her arm from him; he then said never mind, let her bleed in the bed. There was a great deal of blood in the bed; Dr. Ramadge remained in the room the whole time; Dr. R. said do not let her bleed in the bed, he alluded to the spoiling of the bed, but I do not recollect the exact words; I replied never mind the bed; my sister was more exhausted, but the delirium continued; she wandered when she spoke, but was less violent after the bleeding; she slept very little during the night; she was not in her senses, and stupified at times.

On Friday, the 22nd July, about eight o'clock in the morning, the plaintiff and Mr. Bradford came together; my sister was then more tranquil, but did not know those about her. Plaintiff said she was better, and ordered a lotion to be applied to her head; he said she was to take nothing but her medicines. Leeches were applied in the course of the day by the plaintiff's directions; they were to be applied all over her forehead and behind her ears, and they were so applied; all of them filled well. I do not know the number. Late in the evening of this day Mr. Bradford came alone; he said my sister must lose a great deal more blood from the head, and called for a jug that would hold a full pint. He said he should open the temporal artery; I then left the room; I was absent about a quarter of an hour. When I returned I found blood oozing from one of the arteries, the other was bleeding into the jug which had been sent for. I then held

the jug which was receiving the blood from the artery. The jug was within an inch of being full, and there was a great deal of blood upon the bed and upon the clothes. My sister appeared as if she were dead, which alarmed me very much, and I then insisted upon Mr. Bradford's stopping the arteries, as I said I was sure he would bleed her to death. He said it was sometimes a difficult matter to stop an artery. I then begged of him to attempt it immediately. He then closed the artery, and bound up her head; he removed the pillows from my sister's head; she seemed as if life were quite gone. Mr. Bradford walked about the room very much agitated. I asked him if he thought she was dying? he said he thought she was. He gave her a small quantity of sherry with a teaspoon. He removed some of the clothes from the bed, and left my sister with the window wide open. I sent a friend, Mrs. Sabine, to ask what was to be done with my sister? but Mr. Bradford left the house so quickly, Mrs. Sabine could not speak to him. As soon as Mr. Bradford left the house, Mrs. Caprani, the nurse, came. Mr. Bradford and Dr. Ramadge called again the same night, between eleven and twelve o'clock; the patient, my sister, was very much revived. Mr. Bradford said she had recovered more than he expected; and Dr. Ramadge said, from the description Mr. Bradford had given him of my sister's state, he was astonished to find her so revived. I told Dr. Ramadge that the nurse had given her some wine and water; that she closed the window, and put warm flannels to her feet and legs, and put the bed-clothes on again, and thus it revived her very much. Dr. Ramadge desired the nurse to give her no more stimulants, she had had sufficient.

On Saturday, 23rd July, my sister had revived very much. To the best of my recollection, Dr. Ramadge and Mr. Bradford called together about eight o'clock in the morning; they were both in the room together. They ordered mercury to be rubbed into her legs every four hours, and a pill to be given every three or four hours. I do not recollect whether Dr. Ramadge or Mr. Bradford gave the directions. Mr. Bradford called again about noon; he saw my sister, and said he was pleased to see her doing so well; he called me out of the room into the parlour, and ordered me to apply leeches to her head, not that it was absolutely necessary, but to prevent a return of the same attack of the head she had had the day previous; the attack I allude to was a state of stupor. I told the nurse the orders I had received; she objected to apply the leeches, as she had no right to do any thing but what the medical gentlemen told her, and that she did not consider them requisite. I begged she would apply them, because the medical man had ordered them, and she did apply them. My sister appeared more sensible before the

application of the leeches than she had been for some time; but after the application she appeared to fail, her spirits did not seem so good, she did not appear so sensible as before the application of the leeches. I do not recollect whether the plaintiff or Mr. Bradford called again that day.

On Sunday morning, the 24th July, Mr. Bradford called alone; he said he certainly considered my sister better. The rubbing of the mercury on the legs was continued every four hours; I saw it done; she was bled with leeches on this day by Mr. Bradford's order; there were eight or ten applied. During the time the leeches were on, she became much worse. I was much alarmed, and between three and four o'clock p. m. I requested my husband to fetch Dr. Tweedie and Dr. Ramadge. Mr. Bradford called again in the afternoon, before Drs. Tweedie and Ramadge came. He expressed his surprise that I had sent for another physician without consulting him. He did not say how my sister was. He waited until the physicians came; they arrived about dusk. I saw Dr. Tweedie go into my sister's room, and come out again. I offered him his fee, and he at first refused it, and said he did not know that he should act; he afterwards took the fee; at that moment Dr. Ramadge came in. Dr. R. said he had been insulted in my house; he seemed very much hurt; I said I was sorry for it. Dr. Tweedie said he was surprised Dr. Ramadge had hurt my feelings at such a time as this. Dr. Tweedie and Dr. Ramadge remained in attendance. The two Doctors and Mr. Bradford went into the parlour. When the consultation was over, Dr. Tweedie said my sister was very ill, but she was saveable. Mr. Bradford and Dr. Ramadge said they did not consider her worse than she was in the morning. Dr. Tweedie then ordered a pound of lean beef to be made into a pint of beef-tea, to be given to the patient in the course of twelve hours, and the ointment and the calomel pills to be discontinued; my sister had continued to take the pills, and the ointment was applied up to this time. I followed Dr. Tweedie's advice. On the next morning, Monday, 25th July, Dr. Ramadge called before Dr. Tweedie came. Dr. Tweedie came, I think, whilst Dr. Ramadge was there; Mr. Bradford came by himself after the physicians were gone. Dr. Tweedie ordered the beef-tea to be continued. Either on this day, or subsequently, Dr. Tweedie ordered her some arrow-root, and her head to be shaved, and a blister to be applied at the back of the head, all of which was done. When Mr. Bradford came, he said, I must dismiss one or the other of the physicians, for one prescribes one medicine which the other would not put his hand to; and one prescribed leeches and the other would not agree to it. I requested Mr. Robert Reynolds, who was then in the house, to write to Dr. Ramadge in my name to dis-

miss him. After the Monday Dr. Ramadge did not see my sister again. Dr. Tweedie remained in attendance on her.

On Tuesday, the 26th July, my sister appeared better; I cannot say she was sensible, but she knew any one she saw, and she was praying incessantly. Dr. Tweedie ordered some medicine; he directed the beef-tea and arrow-root to be continued, and she having asked for beer, he sent my sister a bottle of porter from his own house; she took the beef-tea and arrow-root, but not the beer. On Tuesday night Dr. Tweedie prescribed a composing pill, and a lotion for the head. She took the pill, and the lotion was applied; she appeared much the same in the evening as in the morning, sometimes better, and sometimes not so well.

On Wednesday, the 27th July, Dr. Tweedie saw my sister in the morning, and had a conversation with the nurse; he considered my sister better.

On the evening of Sunday, the 24th July, when Dr. Ramadge came into the room to me and Dr. Tweedie, and said he had been insulted in my house, he added something about Dr. Tweedie's not being an educated man; there were very high words between Dr. Tweedie and Dr. Ramadge. Dr. Ramadge said he had walked the Fever Hospital for some years; that Dr. Tweedie's

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Dr. Tweedie replied that he had no private pique towards Dr. Ramadge; that he respected him; that it was a public affair, and he was not allowed to act with Dr. Ramadge; that not one of the physicians, either in the medical world, or in London, I do not know which, would act with him. Dr. Ramadge replied, but I do not know what. I said I was awkwardly situated; that I considered my sister was dying, and that I could not decide between them; and that if Dr. Tweedie could not see my sister, I must call in some one else. I said I could not dismiss Dr. Ramadge, as I had called him in first, and I could not settle their quarrels. Dr. Tweedie then left the room, and sent for me down stairs; I went down. Dr. Tweedie then repeated the words he had before said in the presence of Dr. Ramadge; and added, that in consideration of my present distressed state of mind he would act with Dr. Ramadge, but that I was to remember that he had publicly refused to do so, and it was only to oblige me that he consented to do so. Dr. Tweedie assigned as a reason for not meeting Dr. Ramadge something about St. John Long, but I cannot say what.

Cross-examined.—I left Gloucester-place some time in November last; I have had no conversation with Mr. Bradford since the day on which my sister died; she died on the 28th of July last, at five minutes before 4 p. m. Mr. Bradford had seen her on that day; Dr. Tweedie had also seen her on that day; I complained to Mr. Bradford of his neglect in not

sending a pill over night (on Wednesday night), which had been prescribed by Dr. Tweedie. I made no complaint of Dr. Ramadge. I made no memorandum of what took place during my sister's illness. My sister had been at Battersea a fortnight before she returned to Gloucester-place; she lived with me about four years; her health was generally good; she was not accustomed to be bled with leeches; she had had fever about two years before her last illness; I applied leeches to my sister before I called Mr. Bradford in on her last illness; I applied them on the evening before I called him in; I did not apply leeches without his advice after I called him in; I sent my sister Matilda to Dr. Ramadge on the 16th July, to say that the medicine prescribed by Mr. Bradford, had not had the desired effect, and that I was alarmed, and to desire him to come; I did not send for him professionally but as acting for Mr. Bradford; a powder was brought back by my sister Matilda; I do not know from whom the powder came. My sister (Emma) was heavy to sleep from the commencement of her illness, before Mr. Bradford bled her on Monday the 18th July; I do not recollect that Mr. Bradford said that it was on that account he thought it requisite to bleed her; she said at the time it relieved her head very much; I did not give Dr. Ramadge any fees during the time he officiated for Mr. Bradford; when Dr. Ramadge came on Sunday, the 17th July, my sister was confined in her bowels and complained of sickness on her stomach; I think Dr. Ramadge ordered leeches to be applied to her stomach on that day, but I do not know whether they were then applied, but she had them once applied. On the Saturday my sister had taken the medicine sent to her by Mr. Bradford, but her stomach rejected the draught. On Tuesday, the 19th July, when Dr. Ramadge called as a friend with Mr. Bradford, Dr. Ramadge did not prescribe in my house. My sister did not get better under Dr. Ramadge's treatment, as far as I could judge of the case, but I did not object to his treatment; if I had objected I should not have continued him. Dr. Ramadge took great pains in examining my sister to ascertain the real cause of her illness. On the 21st July, I suggested the artery in the head to be opened. I heard that Dr. Ramadge was attending a lady at that time in Bermondsey, and frequently came with Mr. Bradford for that purpose. Mr. Bradford hesitated to open the artery, and as I considered he did not like to do it on his own judgment, I then desired him to call Dr. Ramadge in to give his advice to my sister professionally. I will not swear that Mr. Bradford did not attempt to open the artery before Dr. Ramadge came in; my sister was not in her senses previous to the time when Mr. Bradford opened the artery; I do not recollect that she rolled her head much before the attempt to open the artery, but afterwards she did so very much; I attempted to rouse

her before the artery was opened, but she said let me alone, Sophia; she attempted to strike me whilst she was being bled in the arm; she was in a state of high delirium and violence at the time she was bled in the arm; Mr. Bradford said "she rolls her head so much that I must bleed her in the arm." Mr. Bradford said that the state of stupor was an unfavourable symptom, and that it ought to be counteracted by bleeding; Dr. Ramadge ordered cold water to be poured on her head, which was done. It was repeatedly done and appeared to rouse her at the time; there was no ice applied; I do not recollect whether the head was shaved before the application of the cold water; Mr. Bradford shaved her head for the purpose of bleeding her in the temples; the second time I cut off her hair as close as I could myself. On the 22nd, when the leeches were applied, my sister tore them off, but they were applied again, but she occasionally took one off when her hands were at liberty; I thought my sister dead after the temporal artery was opened, but the next morning she was better. It was late at night when the artery was opened, about 9 or 10 o'clock. The weather was very warm during some days of the illness, but not during the whole illness; my sister's bed-room was not very small, there was one large window in it; Mr. Bradford ordered the window to be kept open, and the patient to be kept cool. The nurse came in the evening after she had been bled from the temples: she had attended Mr. Reynolds, my father-in-law, previously, and I had heard a good character of her, which is the reason I employed her. The ointment directed to be rubbed on the calves of her legs was very heavy and of a lead-colour; it discoloured the nurse's wedding-ring very much, it made it look like silver. I have a recollection of 20 leeches being applied at one time, ten on either side. I calculated after her death, that she had had 140 leeches applied during the illness; they were directed to be applied by Dr. Ramadge and Mr. Bradford; Dr. Tweedie ordered none; I cannot say how often they had been applied to her head before Dr. Ramadge saw my sister, but, I think, twice; I do not recollect whether Dr. Ramadge ordered them to be applied to the head or stomach the first time, but they were applied once to the latter place; I sent for Dr. Tweedie because I thought my sister getting worse instead of better, and I wished to have further advice. After Dr. Ramadge was called in professionally, he attended regularly till he was dismissed, but I cannot name every day; I only recollect giving Dr. Ramadge one fee; the nurse did not recommend Dr. Tweedie, but he had attended Mr. Reynolds, my father in law, and got him through a dangerous fever. I cannot say whether Dr. Tweedie objected to meet Dr. Ramadge before he went into my sister's room; Dr. Tweedie knew from me that he was to act with Dr. Ramadge. Dr. Tweedie said he did not know that he should

take his fee; he did not know that he could act, but he afterwards took the fee. The insult complained of by Dr. Ramadge was something that Dr. Tweedie had said to him; I consider Dr. Ramadge's conduct to Dr. Tweedie more insulting than Dr. Tweedie's to Dr. Ramadge; they both expressed great regret that any misunderstanding should have arisen; Dr. Ramadge did not say that he consented to act with Dr. Tweedie solely on account of seeing me so distressed. I said to Mr. Bradford, as far as I can recollect, that as Dr. Ramadge had been attending my sister I should not be justified to dismiss him in preference to any other, and I wished them to act together; I do not recollect having expressed myself satisfied with Dr. Ramadge, nor saying otherwise.

Re-examined.

The treatment pursued in the first fever about two years ago was different from that in the last; she was not then bled in the head and on the stomach, but not with more than a dozen leeches on the head during the illness; she was not bled from the temporal arteries or from the arm; she was ill six weeks; I think it was four leeches that I applied to my sister before Mr. Bradford was called in; after this I never, during my sister's illness, applied any leeches without Mr. Bradford's or Dr. Ramadge's order; to my knowledge my sister (Matilda) did not bring a prescription with the powder. On Monday, the 18th July, I did not consider her in a state of stupor, but she was very heavy to sleep; she did not lose her senses till the Thursday, when she was bled from the arm.

When Mr. Bradford attempted to open the temporal artery, Dr. Ramadge was present the whole time; he was not present when Mr. Bradford opened the temporal artery; I do not recollect that he ever expressed an opinion on that fact. Dr. Ramadge was called in professionally before Mr. Bradford actually opened the temporal artery, and he had not then been dismissed. My sister was very delirious during the time of the bleeding in the arm after the artery was attempted to be opened; she was quiet before the bleeding, but not in her senses. I saw her in the morning about seven o'clock, after the temporal arteries were opened on the previous night, between nine and ten o'clock. I heard a good character of the nurse from Mrs. Reynolds, whose husband she had nursed in the same sort of fever, as I understood. Between the 15th and 24th of July, 140 leeches were applied. When I offered Dr. Tweedie the fee, he said he did not know that he should act, but at the same time took the fee.

Dr. Tweedie is a physician to the London Fever Hospital for ten years; was called in on the 24th July last to attend a young lady in the Kent Road; had before attended Mr. Reynolds. Saw Miss Bullock in a state of low fever; her skin was cool, her pulse rapid

and soft; she complained of faintness, throbbing in her head. Tongue was red, dry, and a little furred, with a little black crust on the teeth; those were the symptoms I discovered.

Was informed of the previous treatment; ascertained from her sister that she had been seized with the usual symptoms of fever, with gastric or bilious derangement; that the disorder in the brain had come on early, and copious depletion had been employed; collected that a considerable quantity of blood had been taken; and that the last time it was taken it appeared to increase her delirium. It appeared to me at the time I saw her that taking away more blood was not proper. I could only form an opinion that the fever at that time did not bear large losses of blood; this was my opinion, according to my experience. I had understood that friction and mercurial ointment had been employed; I ordered them to be discontinued; after I had seen patient, Dr. Ramadge arrived; Mr. Bradford was not there. Plaintiff proceeded to the bed-room of the patient, whilst I remained in the adjoining room; on his return Mrs. Reynolds left us. He then said to me, I hope you do not consider it a case of great danger? I replied that I did think it so, but before I could have any conversation with him, I felt it my duty to ask how he stood with the profession? He replied that was an impertinent question, and I was an impudent fellow for putting it. I stated that this answer was an additional reason for my declining to meet him in consultation. Mrs. Reynolds then came into the room. Patient had been seized with vomiting, and she came to ask a question. Dr. Ramadge said that the first question of the gentleman she had requested to meet him in consultation was one of impertinence; that because he had chosen to take up the cause of an injured member of the profession, witness had declined to meet him in her sister's case; he added, that he was a gentleman by birth and education, but I was neither. I interrupted plaintiff, stating that this was not a proper opportunity for bringing our quarrels to a termination; that Mrs. Reynolds's mind was sufficiently distressed by the alarming state of her sister. I then left the room, leaving plaintiff with Mrs. R. On the staircase met Mr. Bradford, the apothecary. Went into room below (witness was stopped in what passed between him and Mr. Bradford), soon after joined by Mrs. Reynolds. My reason for refusing to attend with Dr. Ramadge was in consequence of the letter he had written, upholding the character and treatment of an illegal practitioner, I mean Mr. St. John Long. I so stated it to Mrs. Reynolds. Mr. Bradford and plaintiff then came down to me. Mrs. Reynolds had asked me to deliver my opinion of the case to Mr. Bradford, in presence of Dr. Ramadge. I said I would do so. I then addressed Mr. B., and stated my

opinion that the case was nearly hopeless; and my impression is that I ordered an opiate, but am not certain, as I have not seen my prescription since.

Mr. Bradford re-called.—The prescription was written on a slip of paper; I have not got it—*Dr. Tweedie*—I believe it was an opiate I ordered, because she had passed a restless night. During the time I was writing the prescription, Dr. Ramadge asked if I would not allow another dozen of leeches; I made no reply, but proceeded to write the prescription. Mrs. R. afterwards came, and I stated my opinion on the case in the presence of Dr. R. and Mr. B. that the case was nearly hopeless. I saw this opinion made a considerable impression on her feelings; I endeavoured to modify it, saying the case was not so bad as Mr. Reynolds's, and that recoveries from fever under almost hopeless symptoms were not uncommon; she asked when I would return; I said I intended not to return; she said it was not her wish, but requested I would return; I consented, on the understanding that if I met plaintiff it was only as a stranger. Saw Miss Bullock next morning, at eight o'clock; on arriving at the house to which I conveyed Mr. Bradford, plaintiff was at bedside of patient; found her nearly in same state as preceding evening; she had taken a considerable portion of the beef-tea ordered the preceding night. On examination of the abdomen or belly, I found it was beginning to be distended. Mr. B. accompanied me to a room below, and was followed by Dr. R. I ordered an enema, a blister to back part of head, and draught according to this prescription. When I finished the prescription, plaintiff took an opportunity, while I was looking out of the window, to add his initials; I then removed the signature of both. About an hour after, on my return home, Mr. Reynolds called on me, and in consequence of this request I saw Miss B. in the evening alone. On evening of Monday, found her still in state of occasional rambling, with increased distention of the abdomen. Mrs. R. told me, she was at times unmanageable; think I directed a repetition of the opiate; left her. Tuesday morning saw her at eight; Mr. Bradford joined me in about half an hour; found she had slept and passed on the whole a more tranquil night, but found on examining the abdomen that there was a distended bladder, not perceptible preceding evening; observing that this could only be relieved by the introduction of the catheter, I introduced it, Mr. Bradford could not; symptoms gradually increased; she lost her power, and on Tuesday I directed small quantities of wine to be given. Wednesday morning Mr. B. saw her again, and I also; catheter again used; whole appearance then indicated that she could not recover. Thursday morning Mrs. Reynolds complained she had not had her opiate, which she thought had tranquillized her on the preceding night. At

one o'clock I received information that she was much worse; I found her rapidly sinking; she died three hours after my visit. I have heard Mr. Bradford's statement of the treatment; I did not order bleeding of any kind, nor any measures of depletion. I have attended very much to fever in the hospital; there is a remarkable variation in the type of fever, the disorder at one time requires depletion, and at another, blood-letting must be used with great caution. Ordered beef-tea, sago, arrow-root; was not informed that there was beef-tea before; was informed at that time that a course of depletion had been pursued; I pursued no such course beyond a slight aperient; the clyster was with a view to remove the distention of the abdomen.

Dr. Tweedie re-called.—In 1831, the typhus was very prevalent in the Fever Hospital; during the last year and a half, bleeding has not been adopted.

Mr. J. P. Holmes is a surgeon in Fish-street, and member of the Medical Society, established 50 or 60 years; *Dr. Ramadge* was a member of that Society. Witness had made a motion at a general meeting for the expulsion of plaintiff, in consequence of the letter published by him in the *Sunday Times*, vindicating the practice of *St. John Long*, and *Dr. Ramadge* was there; there were a great many who did not vote *pro* or *con*; I do not remember whether *Dr. Ramadge* abused many persons, members of the Medical Society. There must have been about 60 or 70 members. A resolution was read to *Dr. R.* and he made his defence; the balloting-box went round, and the result being announced, *Dr. R.* snapped his fingers at them, and said, "he did not care a d— for them, and afterwards compared their meetings to pot-house assemblies." [The witness seemed extremely indignant at this conduct, and was so warm and vehement in his description of it, "suiting the action to the word," that he threw the court, bar, and auditory into a fit of laughter.—*Rep.*]

Cross-examined.—I will swear there were more than 30; there were 23 balls in the box and only one in his favour; cannot recollect that *Dr. R.* was hissed when he said that *Abernethy* had a general remedy for all disorders; cannot recollect that *Dr. R.* was hissed during his defence, but he was hissed after he had snapped his fingers at the meeting.

Mr. J. Field is Registrar of the Medical Society, plaintiff was a member. Remembers plaintiff was present when *Sunday Times* of 10th April, 1831, was produced; letter therein was signed by plaintiff, and was read.

Cross-examined.—Plaintiff was not often there during the twelvemonths previous; I think he had been there.

Mr. B. C. Brodie never saw plaintiff; have seen the letter in *Sunday Times* of 10th April formerly. I cannot speak to any particular instance of any medical man refusing to con-

sult plaintiff; I have not been requested to consult with him; I have not refused to consult with him because I have not been requested to do so; I have heard that other medical men have refused to consult with him.

[Counsel for plaintiff objected to witness answering, would you consult with him? Court admitted objection; counsel for defendant contended that question ought to be answered, and requested the Judge to take a note of the point—note taken.—*Rep.*]

Mr. Field recalled.—Plaintiff admitted he was author of the letter, made a lengthened defence of the latter, which merely re-echoed the sentiments in the letter. He said he had given permission to *Long* to do what he pleased with the letter. He defended the treatment of *Miss Cashin* by *Long*; there was a rule to the effect that his name should be removed from the list of Fellows—for the motion 24, against it 1.

Cross-examined.—Thirty names entered as present. Collected for the Society at that time; plaintiff had not made up his mind to continue his subscription, it was due from him; in the month of March he said this; I collect subscriptions prospectively; one voted against the motion. *Mr. Jones* spoke against the motion; plaintiff was hissed at last, not hissed in course of his defence, hissed out of the room.

Re-examined.—Others might have been present, and I have not taken them down; Society consists of 200 corresponding members, and about 80 or 90 town members, all of whom were summoned.

When this witness left the box, the following letter was read:—

Sunday Times, April 10, 1831.

"MR. ST. JOHN LONG'S NEW BOOK.

"This gentleman has just laid before the public a volume, entitled—*A Critical Exposure of the Ignorance and Mal-Practice of certain Medical Practitioners, in their Theory and Treatment of Disease; likewise Observations on the Primary Causes of Ailments, connected with the Discoveries of the Author.* 'No man deserves a monument who could not be wrapped in a winding-sheet of papers written against him,' says *Pope*, and *Mr. St. John Long*, taking this pithy sentence for his motto, could certainly prove that he is not without the qualification required for a monument. We are no friends to imposture, and if *Mr. St. John Long* deserves a fiftieth part of the condemnation which has been poured upon him, we shall be glad to see him put down for ever. It will, however, be seen that he shrinks not from meeting his enemies; he, on the contrary, invites an immediate renewal of the war, when they seem disposed to accord him a truce, and comes forward not only to vindicate himself, but to inculpate them. The important question between him and the faculty is one on which we do not feel ourselves competent to decide, but we do feel; that after the steps which have been taken against him, it is but reasonable that he should

be listened to while he states what he has to say in defence of his system. To this his most formidable opponents can hardly object. He, of course, can claim no forbearance from them. Their right to demolish him, if they can, is unquestionable—his claim upon their fairness only amounts to this, 'Strike, but bear.'

"One of that learned body has not only ceased to be in the ranks of his enemies, but has come forward in his defence. Dr. Ramadge, a Fellow of the College of Physicians, and a very eminent practitioner, considers Mr. Long to have been *cruelly persecuted*, and, in a very able letter, he repels many of the charges. We cannot go into the general contents of the volume, and the defence of the treatment of the two ladies whose death have been the subject of so much comment; but the letter of Dr. Ramadge is entitled to particular notice, and, no doubt, it will prove equally interesting to the friends and foes of Mr. Long. Having been called upon by the latter to give an impartial opinion, he wrote as follows:—

'Ely-place, March 31, 1831.

'SIR,—In reply to your letter of last Saturday, I must say, that however reluctant I may feel in publicly expressing my opinion on the cases of the late Miss Catherine Cashin and Mrs. Lloyd, yet I cannot, with any feelings of common justice, refuse your request; and, in so doing, beg to premise, that I shall give it impartially, inasmuch as I conceive it to be a subject respecting which the medical profession and yourself are at issue.

'Participating in the excitement against you, which pervaded all ranks of the profession, I was, at first, without mature deliberation, disposed to believe that the treatment adopted in the cases of the ladies above alluded to, had led to those events which ultimately formed the subjects of judicial investigation. However, upon viewing the cases in all their points, and after deep reflection, my opinion is now entirely changed.

'Some time in the month of August last (1830) Miss Catherine Cashin (upon whose remains a coroner's inquest was subsequently held) was your patient, and apprehending that her disorder might become as precarious as that which promised to terminate speedily in the demise of her sister from pulmonary consumption, you did, I believe, suggest the propriety of employing precautionary measures, so that, if possible, she might avoid that fate which had already lessened the number of her family. In order to effect this desirable object, I understand that it is your practice (like that of many eminent practitioners of the present day, who are in the habit of employing only one or two remedies in the cure of almost every disease) to have recourse to the processes of counter-irritation to the surface of the skin, and also of inhalation.

'I have recently been at considerable pains to ascertain, by a multitude of enquiries made

in various quarters, whether those individuals who were your patients had, at any time, experienced any noxious or unpleasant effects during their employment of one or both these remedies; and I feel it my duty to state that their replies have uniformly been in the negative, and that in no instance did they deserve the name of "*dangerous*," which has been applied to them, and likewise, that no unpleasant consequences have supervened.

'The *post mortem* examination of Miss Cashin satisfactorily proves to me the correctness of your judgment, as to the existence of pulmonary disease, and which, in my opinion, fully justified you in the steps you took, in the hope of suspending or removing an affection of such a fatal tendency; and, whilst she was without fever or marked local uneasiness, to employ counter-irritation, as well as inhalation. I cannot possibly conceive how the same remedial agents, after having been used by numerous individuals without their sustaining the least injury, can in any degree be assigned as a cause of what afterwards took place. Most ample experience in medicine has shewn me, how easily effects may be attributed to inadequate causes. For among all the months in the year, August is noted for those affections of the stomach and alimentary canal, which often appear spontaneously, and in females particularly, inasmuch as we find the former organ in them to be a great sympathiser. And I do in truth assert, that in some cases, owing to the continued irritability of the stomach, the vital powers have failed, and unexpected death has followed; leaving, upon the most minute dissection, nothing satisfactory to account for the fatal change.

'Since such may take place, can we not easily imagine that a case of this kind might unfortunately occur in your's, or any other person's hands? But when we find, on perusing the evidence against you, the great quantity of plums and purple grapes, eaten by the lady alluded to, and presuming that she had a great and natural solicitude for her sister's sufferings, our surprise lessens whilst there existed such causes for local and general irritation—namely,—that a high state of fever should supervene, and that what, without it, would have remained a trifling insignificant sore upon her back (it being merely an abrasion of the *cuticle* or *scarf-skin*), should give origin to so much pain, and subsequently assume those appearances, respecting which such a strange diversity of opinion was exhibited by the professional witnesses against you, and which I fear will contribute more than any thing in modern times, to shew the unstable grounds upon which, unfortunately, the art or science of medicine is founded.

'Whilst the stomacheal irritability kindled up constitutional fever, a sore of the most harmless nature might become highly inflamed, and even be the cause through sympathy for those violent retchings that took

place afterwards, and might impair the vitality of that organ, through a diminution of which deaths occasionally occur, examples of which are at times seen in cases of spasm occurring through gout seizing the stomach, a violent blow upon that organ, &c.

'To me, who have had for more than eleven years past, unequalled opportunities of treating, and where death has taken place of investigating, numerous affections of the chest,* I do not exaggerate when I say that I have opened *more than a thousand bodies of consumptive persons* alone. It has always appeared to me, and the same opinion has been entertained by the principal modern continental pathologists, that the imperfectly formed cicatrices, one of which was found in the summit of each lung in Miss Cashin (though contrary to the statements made by some medical men who examined the body of the deceased), had been formed from tuberculous matter (the presence of which constitutes consumption), which, having undergone a softened state, and in this way being expectorated, allowed the cysts which remained to heal up like any ordinary abscess. I have numerous specimens in my museum, showing the progressive changes which tubercles undergo, until their place becomes supplied with condensed cellular membrane.

* * * * *

"Dr. Ramadge proceeds to vindicate Mr. Long's treatment of Miss Cashin and Mrs. Lloyd; but this we are obliged to omit, the ground having been so often gone over, and the details being more interesting to the medical than to the general reader. The Doctor thus proceeds:—

'I hold myself bound, as a member of the profession, to act with charity towards every individual. And as you were actuated by good motives for the benefit of your fellow-creatures, and as I know you to be far from being the ignorant and illiterate person whom your illiberal and invidious traducers wished the public to believe, it strikes me that the surgeon whom I am now speaking of ought not to have been the first to raise his voice against you, but, on the contrary, have had some charitable feeling; from the conviction, *that while he sought for a mote in your eye, he might possibly find a beam in his own.* A few years ago some of my pupils informed me, that high operations for the stone were performed at St. George's Hospital, by Mr. Brodie; the events were most unfortunate; and, I believe, commented upon pretty freely by more than one anatomical lecturer in this metropolis. * * *

* Having been nearly eleven years physician to the Infirmary for Diseases of the Lungs, and for a considerable period physician to the Central Dispensary, independent of my private practice, I have thus been enabled to see more than *twenty thousand* persons afflicted with these maladies.—F.H.R.

'The precocious deductions of Mr. Brodie on points of experimental physiology, are, many of them, as I have myself ascertained, quite fallacious; and the few recently published facts, by a physician and surgeon of Guy's Hospital, show clearly, at all events, how much mistaken he has been on the action and effects of morbid poisons in the animal economy.

'A few years ago I was respectably introduced to Mr. Vance, whom I regard as a worthy and skilful individual, but who had no motive whatever for stating any palliative circumstance in your behalf, for I perceive that Colonel Campbell's daughter, who was pronounced in a hopeless state by him and Mr. Brodie, got infinitely better in your hands, and I recollect hearing Captain Lloyd say, that Mrs. Lloyd was an old patient of Mr. Vance's for that very uncomfortable and truly distressing affection of the throat, which, although hysterical, and regarded by him as insignificant and devoid of danger, I have known to lead both to disease of the wind-pipe, and to scirrhus and permanent contraction of the pharynx and œsophagus, which specimens in my museum, obtained even within the last year or two, can testify. I go farther than this, by stating that a violent spasmodic affection of the throat, purely hysterical, does occasionally prove speedily fatal, leaving no morbid appearances, except the rupture of a few air-cells in the lungs. Mr. Vance's early professional life has been most usefully employed for the public weal; but it is most likely, through his naval appointments, that he has been deprived of his fair proportion of female cases, consequently I may make every due allowance for his apparent indifference about the safety of hysterical patients.

'As ten days elapsed before Mr. Vance was called in, after Mrs. Lloyd had been under the care of another practitioner, I consider it needless to make any further comment upon his evidence, with this exception, that '*if you stated Mrs. Lloyd had suffered disease of the chest, which dissection is said not to have proved to be the case,*' your mistake is not solitary, for I hardly know of one of the profession, of whom I have not heard, and of many of whom I have not been a personal witness of their erroneous judgments. I may here relate a case in point.

'When his late Majesty was ill, I was sent for several miles out of town, to visit a gentleman who conceived himself to be similarly affected to that illustrious monarch; he had the advice of two physicians, attendants on royalty, also that of a university professor, together with an eminent provincial physician. Though he was attacked, as I discovered in consequence of atonic gout, with inflammation occupying the inferior and middle lobes of the right lung, and soon after with extensive effusion into the left cavity of

the chest, combined with general dropsy; these I conceived to have arisen in consequence of the early want of skill in auscultatic discrimination of the inflammatory state of the lungs, which of course in a great measure prevented the free circulation of blood from the right side of the heart, and gave origin to general venous congestion, followed by aqueous effusion, from the exhalent orifices of the arterial system of various parts of the body. Though he suffered in this way, and though the right ventricle of the heart, labouring to overcome the obstructed circulation in the lungs, was almost itself sufficient to afford some clue to the nature of his disease, yet it pleased these learned physicians early to consider his complaint to be spasmodic or asthmatic. One general practitioner there told me he had a disease of the heart, which, in a certain degree, was possible, for many persons advanced in years exhibit some change of structure in that organ, and which is too often supposed by many in our profession to be of greater importance than it really deserves. I felt satisfied that in this instance it was not the cause of the effusion; and in this opinion I am borne out from the ample experience I have had in attending vast numbers of chest affections, and from having examined a great number of dead bodies. The treatment they pursued was in strict accordance with *their* ideas of the disease. It was chiefly antispasmodic and stimulant; ether, wine, and opium were prescribed, instead of bleeding, the administration of mercury, diuretics, &c. He was daily getting worse under their treatment, which caused him to request my advice.

'Judging from a conversation I had with you, for the first time after the inquest upon Miss Cashin, you induced me to think that as professional merit, under the present corrupt system of patronage, witnessed in the various responsible appointments to our public universities, colleges, court, hospitals, infirmaries, &c. was overlooked, you had no chance of fair competition; and as nearly one-half the medical profession are unlicensed, and practise under the names of surgeons, accoucheurs, chemists, &c., you saw no reason why you should not act as a medical practitioner, having early had a taste for medicine, and also, to my knowledge, having, in an anatomical school, where I lectured some four years ago (without any personal acquaintance with you at that period), purchased dead bodies, at a considerable expense, for the purpose as I believe of dissection, and of studying visceral anatomy in particular. You seemed perfectly aware of the low condition of medical practice in this country; for a man ninety years of age, or in a state of dotage, might, in London, be a surgeon to a public hospital. You seemed perfectly to understand that a titled surgeon publicly stated, that wherever he turned his eyes in two adjoining hospitals, he saw

nothing but the abusive exhibition of mercury, even in cases where it is now universally admitted by medical men to be perfectly useless. To the best of my recollection, I replied, that about two years ago I formed one of a dinner party with two physicians (beside myself), and more than double that number of surgeons, and that one of them (himself a surgeon to an hospital,) stated, I believe, with a view to exonerate himself, that his relative (the accuser), rarely visited his own wards for a particular class of diseases, and that the nurses thereby being uncontrolled, regularly salivated each patient in order to entitle themselves to an additional gratuity of sixpence.

'You complained to me much of the persecution you had endured from the medical profession, and you seemed to think, as I do myself, that had you not been very fortunate in gaining the confidence of the public, you never would have been the victim of their envy and malignity, however great your want of success might have been; and you said, that if they did not prefer their own private advantage to the public, they would have long since turned their attention to the defective state of our hospitals, and other eleemosynary institutions, where frequently men without any apparent ability, provided they are near relatives or intimate friends of some influential medical officer, obtain appointments (some of them having been bargained for previously by bonds in heavy penalties); and also if the public health lay so heavy at their hearts, they would have recommended that more than one day in the week should be appointed by themselves for seeing their unfortunate *out-patients*, and also more than one day in the same space of time for the admission of *in-patients*, accidents excepted. The value of medical opinion you spoke very lightly of, for you mentioned Dr. Brown of Edinburgh, who never practised himself, yet he wrote a work in favour of injurious stimulant agents, and that almost the whole profession eagerly embraced, for many years, his doctrines, which generally led to the death of thousands, and even tens of thousands.

'To shew the value of the concurrent testimony of medical men, you stated that a few years ago some medicines, and particularly the antimonial powder, and its prototype, that of the late Dr. James, were universally believed to be sovereign remedies in the cure of febrile and various other affections, and that there are numerous cases published of the efficacy of these medicines, which almost every practitioner of an unbiassed judgment now a-days confidently believes to have never been otherwise than inert agents. To shew still further the value of medical opinion, you stated, that had you been old enough to have commenced practice twenty years ago, without completely salivating in particular disorders, after the fashion of the times, you

most likely would have been persecuted as now, although your patients would have escaped many painful secondary affections, or perhaps the complete ruin of their health.

'You know that the late Dr. Armstrong was rejected by the College of Physicians in London as an incompetent practitioner, yet he was supported by the public, and hardly half a-dozen years elapsed, before he realized a larger annual income than the President, or any of the Fellows who had rejected him, or in fact any physician attached to our metropolitan hospitals or dispensaries: to add to which, he was enabled to boast of having the largest class of medical students in the metropolis.

'If you are accused by the profession of ignorance, you may without difficulty comprehend what degree of anatomical information is necessary to be a distinguished physician attached to one of our hospitals, and the adulatory protégé of an old influential medical man, when I state that three medical friends of mine examined not long ago the body of a person supposed to have been destroyed by poison, when after removing the stomach and sewing up the body, it was re-examined, at the wish of some of the deceased's friends, by the physician I allude to, who pronounced that death was not occasioned through poison, but that the stomach was ulcerated sufficient to cause the disease. However, I must add that this organ was in the possession of one of the previous examiners, and that the learned Doctor mistook a portion of large intestine which he opened for that viscus.

'Having replied to your questions as to my candid opinion as to the causes which might have terminated the existence of Miss Cashin and Mrs. Lloyd, I must express my regret, that the moments I have chosen for this purpose, have been hastily snatched after much fatigue caused by my professional avocations: it is to this cause I must apologize for such imperfections as may appear in the foregoing observations.—I have here, I hope, fulfilled a duty I owed to my conscience, in openly and fearlessly, after deep deliberation, replying to you as I would have done to any person in your situation, THAT YOU ARE A GUILTLESS AND A CRUELLY PERSECUTED INDIVIDUAL; that you have received from the medical profession not that impartial evidence which they would have vouchsafed to have given towards a licensed practitioner; and I do not say too much, when I assert, that there are usually two species of medical evidence given, although perhaps unconsciously, one for the licensed practitioner, the other for the unlicensed.

'I know, Sir, very little of you or your practice, therefore I hope the public will deem me to be disinterested, but at the same time no timid or servile follower of medical opinions and doctrines, which experience too

often shews to be fluctuating and undetermined.

'I remain, Sir,

'Your obedient servant,

'FRANCIS H. RAMADGE, M.D. Oxon,

'Fellow of the Royal College of Physicians, and Lecturer on Medicine, &c. &c.'

'John St. John Long, Esq.

Harley Street.'

Mr. Robert Little Hooper is a surgeon, residing in the London Road, knows plaintiff and defendant; present at a meeting of medical men at the Cholera Hospital in the Borough, 20 or 30 present; plaintiff attended. Plaintiff observed in reply to some thing a physician had said, and no notice was taken of it; the other medical men turned their backs upon him; no one consulted with him; this took place in March last.

Dr. Thomson is professor of materia medica in London University, knows plaintiff by name, and seen him to-day; I heard letter read to-day, have heard it represented to me by others, and it agreed with what I had heard; never requested to consult with plaintiff. [Court would not permit witness to state whether he would meet plaintiff in consultation.]

Mr. Joseph Maccrea is a surgeon at Islington. I was attending a young lady in May, 1831, her mother expressed a desire that Dr. R. should be called in; I stated to her that I could not meet plaintiff, but she was at liberty to call in any medical man she thought proper. I refused to meet him in consequence of the letter I have heard to-day.

Cross-examined—I am a member of the Medical Society, I black balled plaintiff; Mrs. Ing was the lady of Pentonville, I told her there was no necessity of having further advice.

Dr. James Johnson; is Physician to the King, knows plaintiff by name, I have been personally acquainted with him for some years; saw the letter in the *Sunday Times*; I have declared to many people my intention not to meet plaintiff, I said it immediately after that letter; I have declared that intention in very many instances.

Cross-examined.—I have met plaintiff about eleven years ago; I met him once or twice since: I know he refused to meet me, but he did meet me; his reason was not that I had given a false account of a medical case; I never had a conversation with plaintiff on such a false medical case; not present on the night he accused and misrepresented me; plaintiff gave the false account, not I; he nor no other man dare accuse me of mistaking a case in my presence, he did so in my absence; it was eleven years ago when he refused to meet me, as I had not the licence of the Royal College of Physicians; but he changed his mind, and we consulted.

[Dr. Uwins was put in the witness box, but as he had not refused to meet plaintiff, would not be allowed to be examined—

Mr. Lawrence was called, but he had left the court, and was sent for; but he did not arrive before the Judge commenced his charge. Mr. Robert Brien was called, but did not answer; he had attended on Monday; and was one of those who refused to meet plaintiff in consultation before the publication of the libel.—*Rep.*]

Serjeant WILDE addressed the jury for the plaintiff, and asserted that the justification was not established, that there was a conspiracy in the medical profession to ruin his client, and that the defendant was the organ of that conspiracy; that the patient was dead when he represented her as recovered; that Dr. Tweedie's evidence did not shew that he changed the treatment. He called upon the jury for a verdict, as his client had acted conscientiously.

The CHIEF JUSTICE said that the real point for the consideration of the jury was, the libel copied from *The Lancet*, and that the comments by Dr. Ryan, need not occupy their attention, as they were of minor importance. They had to consider whether the comments exceeded the limits of fair and impartial criticism, with a view to elicit the truth or institute a fair investigation, or whether they were malicious. They had to determine whether the justification was fully proved, and whether the criticism was candid and impartial. The publication of the libel in *The Lancet*, did not screen the defendants in this case; and moreover it was to be observed that some sentences had been printed in roman and italics. There was one part untouched, and that was, the patient was dead at the time the defendants had said she had recovered, and that ninety-six leeches were applied, which was not true.

Mr. Serjeant TADDY reminded the judge that the defendant had apologised, and offered to insert any communication from the plaintiff.

The CHIEF JUSTICE said it was true the defendant had apologised, and offered to insert any communication from the plaintiff, but he nullified this offer, by justifying the libel. The jury had to consider whether the defendant had exceeded the limits of fair and impartial criticism, and whether he had fully justified the libel. He thought he need scarcely read the evidence (no, no, no, from the jury) as he had placed its value before them. If they thought the defendant had not proved his case, or had injured the reputation of the plaintiff, they would find a verdict for the plaintiff; and if on the contrary, they considered that the defendant had not exceeded the limits of fair and candid criticism, they would find a verdict for him.

The jury consulted for some time, but could not agree; an officer of the court was sworn in the usual way, to prevent them from having food, fire, or candle light; they were then locked up and the Judge retired.

The jury remained locked up from a few minutes past six to nearly seven o'clock, when they returned into court with a verdict for the plaintiff. Damages £400.

Some of the most eminent members of the medical profession were in attendance during the whole of the trial, which lasted from half past nine o'clock in the morning to nearly six in the evening, or rather until seven, when the verdict was returned.

Remarks of the Medical and Public Press on the preceding Trial.

"Devotedly as we are attached to the liberty of the press, we might have yielded a few of our columns to remarks connected with the trial of Monday, had we not been suddenly and unexpectedly checked by what we cannot avoid deeming the extraordinary result of the deliberations of Tuesday. Entertaining towards Dr. Ryan neither a friendly nor an unfriendly feeling, the character of the alleged libel, and the circumstances under which it was published, compel us to look upon an award of four hundred pounds as an amount of damages unusually excessive. What a contrast! *One farthing* on the Monday, and *four hundred pounds* on the Tuesday, as a compensation in damages for an injury of precisely the same extent in its primitive character! But mark! The Journal against which the lowest coin in the country was given, is circulated to an extent beyond comparison greater than that publication, the Editor of which is cast in half the amount of damages laid in the declaration—the injury having been estimated by the plaintiff at eight hundred pounds in both instances. Here, then, we have the effects of what some would designate the "glorious uncertainty of the law." But the expression receives not our assent, because the difference furnished by the instances before us is surely attributable, *not* to "the uncertainty of the law," but to some essential variations in feeling and mind possessed by the gentlemen who sat as jurymen on the two causes.

"Not having been present on the Tuesday, it is not in our power to speak, from personal observation, of the demeanour of the individuals who composed the jury on that day; but with respect to the gentlemen who officiated as jurymen on Monday, their names and addresses will be found in a brief notice of the trial in another column. Holding as they do such honourable stations in society, it would be impertinent were we to comment on their claims to respectability. We cannot, however, refrain from stating that these gentlemen paid the most scrupulous attention to the evidence, the arguments, and the summing up of the learned Judge, and that, whether drawing our inference from the pertinent questions proposed by them to the witnesses, or from the verdict of "*one farthing damages*," we believe there was not an individual in court who questioned either the purity of their intentions, or the soundness of their de-

cision. And be it observed we make no exception here of the plaintiff, his attorney, or John Long, all of whom were present. Under such circumstances, who is to understand the grounds on which four hundred pounds were awarded against Dr. Ryan and his publishers? Those who approve of the verdict given on the Monday, will of course be strongly inclined to question the propriety of the Tuesday's award, because it cannot be forgotten, in estimating the amount of damages granted in the two cases, that the prosecuted article was *first* published in the *Lancet*, and copied from that work into the journal of which Dr. Ryan is editor, and Messrs. Renshaw and Rush—the other defendants—publishers. There is however this important distinction to be drawn between the two cases. The Editor of the *Lancet* did not offer to “*apologize*” to the plaintiff, and then go into court with a plea of *justification* upon the record. Here was a discrepancy in the conduct of Dr. Ryan, which his jury could not overlook without being utterly destitute of common sense. If an apology were called for, the offer of one was handsome, generous, and consistent; but surely it could not appear just to the upright minds of twelve impartial men to persist in an attempt to *justify* statements which, by the defendant's own admission, entitled the plaintiff to an apology. The jury, believing that Dr. Ryan would not have proposed to apologize without a conviction that he was in error in making the publication in question, were necessarily compelled to consider that a perseverance in the plea of justification was little short of an act of determined persecution. The defendant in this cause either *was*, or was *not*, warranted in his offer to apologize; if the former, his plea could not appear to the Court otherwise than an unjust one; if the latter, his proposal to apologize must have seemed to originate in a desire to screen himself from the consequences of an action for libel, rather than to render justice to the plaintiff, or to protect the public from injurious practices. Although, therefore, we are disposed to look upon the award of damages against Dr. Ryan, as excessive in a marked degree, yet we must confess that he did not occupy, before the Court that position which alone can be filled by an unflinching member of an upright, independent, medical press.”—*The Lancet*, No. 461, June 30.

[The above comment upon the trial of Ramadge v. Ryan is just, on the extraordinary decision of the jury in awarding damages against Dr. Ryan in an excessive degree, but Mr. Wakley has taken a very mistaken view of the apology offered in the first instance to the plaintiff. This was due to the plaintiff, when he alleged that the statement published by the defendant was incorrect; and there is not an editor in the kingdom, except Mr. W. himself, who would refuse an apo-

logy or reply under such circumstances. Dr. Ryan's object in copying the article was the promotion of science, and his right to make fair and impartial criticism on the published practice and conduct of Dr. Ramadge, or any other member of the faculty; but he never did, nor never will, persevere in misrepresenting any man, much less a member of his profession. Mr. Wakley next comments upon the impolicy of the justification after the admission of an apology. To this it can be answered, that before Dr. Ramadge had threatened to commence law proceedings, Dr. Ryan made every inquiry into the truth of the alleged libel, and found that Mr. Wakley had sent to Mr. Bradford to ascertain the truth of it, before its publication in *The Lancet*; that Mr. B. had said it was true, and that the statement made by Mrs. Reynolds confirmed every part of the case, except the recovery of her sister. She stated, and afterwards proved, that between the 15th and 24th of July, a period of ten days, 140 leeches were applied, a vein in the arm was opened, and twelve ounces of blood abstracted; a second depletion, when the quantity abstracted was more; a third depletion, by arteriotomy from the temporal artery; or a pint of blood detracted, so that estimating each leech at taking half an ounce, 98 ounces, or over six pints of blood were abstracted; or estimating each leech as taking three quarters of an ounce, the quantity of blood abstracted would be over nine pints in ten days. The type of the prevailing fever was low at the time, and did not warrant excessive depletion, as proved by Dr. Tweedie in court.

Will any educated medical man in the kingdom say, that this was not a case that deserved criticism? Besides, Dr. Tweedie had informed a friend of Dr. Ryan's before the publication of the article, (Mr. Hughes, surgeon, of High Holborn), that the letter in *The Lancet* was substantially correct. It has been remarked by some, Why did not Dr. Ryan go to the Kent Boad to ascertain the truth of the statements in *The Lancet*? But was this necessary after the physician and apothecary had stated they were true?

Mr. Wakley adds, “he (Dr. Ryan) did not occupy that position which alone can be filled by an unflinching member of an upright, independent, medical press;” or, in other words, Mr. Wakley alone occupied that high position, by refusing to apologize to the plaintiff for a much more aggravated libel, which no medical man on reading it could believe, namely, that the plaintiff had given calomel in teaspoonful doses—a statement that Dr. R. did not copy. Lastly, Mr. W. states, that his periodical “is circulated to an extent beyond comparison greater than this Journal.” He should have said *was*, not “is,” in this sentence, as he has good reason to know that this work has at present a circulation very nearly equal to his own, and far exceeds that of any other medical Journal.]

Dr. McLeod, the well-known, though anonymous scribe of a contemporary Journal, has indulged in his usual strain of insolent vituperation on Dr. Ryan, and other physicians, who were witnesses in the above trial. The good taste and kind feeling evinced by this person on the issue of this investigation reflect lustre on his head and heart. We shall take no farther notice of so able a writer, and so talented a rival on this occasion, but we shall acknowledge our obligations to him as soon as possible. Wise in his own conceit, he must feel proud that he stands opposed to the whole public press, and the entire profession.

With the strongest disposition generally to support the verdicts of juries, we must fairly own that we are puzzled with the decisions of two juries which were given in the Court of Common Pleas on Monday and Tuesday last. If we approve of the farthing damages against the *Lancet*, we must condemn the 400*l.* damages against the other medical Journal, which copied its libel. If, on the other hand, we think the latter verdict right, then we must declare against the justice of the former. If Dr. Ramadge's feelings and professional character were only worth a farthing on Monday, they surely could not rise to the value of 400*l.* on Tuesday. If the *Lancet* deserved impunity, minus the smallest of the King's coin, the *Medical Journal* ought not to have been punished by the loss of four hundred golden sovereigns.

It ought likewise to be remembered, that the *Lancet* was the original offender (we say nothing of the offence), and that its contemporary only copied the alleged libel on the following week, and without any injurious comment. Had the cases been reversed, and the verdict first delivered been transferred to the libel last tried, there might have been some meaning at least in the award, but as matters now stand the whole is a mystery. If this mystery is to be explained by reference to the different modes of conducting the two trials, we fear that the measure of justice which varies with the power of the advocate, is not likely to be very satisfactory, either to the parties concerned, or the public generally. —*Times*, June 28th.

A heavy press of matter prevented us from noticing yesterday the recent verdict obtained by Dr. Ramadge against Dr. Ryan for libel, which has given rise to much conversation, not only amongst the faculty, but amongst the public at large. There seems to be a fatality in all libel cases. The laws affecting them are, generally speaking, severe and unjust, and the verdicts are often capricious, even where the law is clear and intelligible. What constitutes the hardship of Dr. Ryan's case is, that the libel in which he was cast in damages to the amount of 400*l.* had been copied from the *Lancet*, and that the *Lancet* had escaped with only one farthing damages a short while before. If this be justice it cer-

tainly is not equal justice, neither is it common sense. No principle can be stated, no combination of circumstances can be supposed which could justify a distinction to the disadvantage of the individual upon whom the severity of the law has fallen in the present instance. Such anomalies in the conduct of juries are perplexing things; they have even caused some wise men to doubt whether that boasted mode of trial be not after all a delusion. —*Herald*, June 29, 1832.

"We direct attention to the Report of a trial yesterday, in which the plaintiff was Dr. Ramadge, and the defendant was Dr. Ryan, Editor of the *Medical and Surgical Journal*, a weekly publication of considerable merit, to which the public are indebted for many of those exposures of medical quackery and fraud by which their interests are promoted and science is advanced.

"The Dr. Ramadge who figures as the plaintiff in this cause, is, it is said, a physician of considerable talent, but in consequence of some extraordinary opinions delivered by him, in favour of Mr. St. John Long, a person of great notoriety, this Dr. Ramadge has been rather contemptuously treated by the members of the profession, who think it neither respectable nor wise that a regular physician should countenance the practices of a quack.

"Some time since an article appeared in *The Lancet*, imputing to Dr. Ramadge unskilful and improper treatment of a patient, and for this an action for libel was brought. The real or supposed connexion of Dr. Ramadge with Mr. St. John Long, had nothing to do with his conduct in this affair. Such connexion might be disgraceful to him, but he was nevertheless entitled to protection in his own practice, so long as he observed a right course. This was admitted on the trial in question, and his own merits only were discussed. The defendant pleaded his cause in person, and the jury, whether properly or improperly it is not for us to say, gave the doctor one farthing damages for the injury which his professional reputation had sustained.

"Dr. Ryan copies into the *Medical and Surgical Journal*, the article which had appeared in *The Lancet*, and he appends to it a comment which it seemed naturally to call forth. There was nothing in this comment libellous or calumnious, unless the article upon which it was founded be both, yet Dr. Ryan is, by another jury, condemned to pay 400*l.*

"Now, trial by jury is a very fine thing, and we should be sorry to exchange it for any other mode of settling disputes; but that it has its faults we think no man can deny. Two gentlemen are proceeded against on similar grounds—one is condemned to pay a farthing—the other 400*l.* It is to be observed also, that the farthing penalty was for an original offence; the four hundred pounds

are for a secondary and minor offence. This is not the first nor the twentieth instance of such contradictions during the last two or three years, neither will it be the last. There ought to be some discretion in such cases in the breast of a Judge. As the law now stands, indeed, an appeal may be made to the Bench for a new trial; but the remedy is an expensive one, and there is no certainty as to the cure.

"All the difference that we can perceive in the two cases is, that in one the defendant pleaded his own cause, and in the other the defence was entrusted to those who are considered so much more competent to the task. The gentlemen of the bar, however, will not admit that the fault was on their side; neither do we think it was. The juries who heard the two causes would therefore render a public service if they would condescend to explain the grounds upon which their respective decisions were made."—*Courier*, June 27th.

"In our law intelligence will be found a singular discrepancy of opinion between two Special Juries on virtually the same libel case—"Ramadge v. Wakley"—and "Ramadge v. Ryan." In the former, one Jury considered a *farthing* sufficient to cover all the injury Dr. Ramadge had sustained from the libel in question—in the latter, another Jury, considered the sum *four hundred pounds* not too much compensation for the same. There was, it is true, some little difference, but very little—in the two libels, the latter being the more severe—but then, Dr. Ryan was the copier, not the originator of the slander; and this should have operated in extenuation of the offence. We recollect some years ago, a libel case tried at the Assizes at Shrewsbury, in which *three* provincial papers were implicated—first the original offender—second, the copier, and third, the copier from the copier. It so happened, whether from design or accident we forget—that the last was tried the first, and the Jury gave the plaintiff 250*l.* damages. The next case tried was that of the first copier, and another Jury delivered a verdict of 50*l.* only, against him. Then came the case of the original offender, and a third Jury gave their verdict, *in his favour*. This was at the time accounted for by the circumstance of some days having elapsed from the time of the first trial to that of the last; and in the interim much conversation had taken place, and much astonishment had been expressed respecting the first and second verdicts—particularly the first. This, it was supposed, made such an impression on the third Jury, that they found for the defendant. An evening paper (*The Courier*) proposes to remedy these gross contradictions by giving additional powers to the Judge; but the truth is, the Judge, in libel cases, has already too much power, or rather the timidity of Juries allows him too often to usurp too much. The only remedy we see,

is the publication of the names of the Jurors—not so much for any purpose of exposure, as for that of creating another tribunal, that of the public, before which even Jurors might be liable to be arraigned. We readily admit that one man may see the same thing in a very different light from another, but that two men should so entirely disagree with other twelve, as in the cases we have cited, is so extraordinary as to seem to call for some corrective. We however are so jealous of the trial by Jury, that we can find no other cure for this evil than the one we have named."—*The News*.

"The discrepancy in the verdicts for damages, in the two recent actions for libel on medical character, affords another amusing exhibition of the *lottery* of libel law, and of the quality of the intellect which occasionally finds its way into jury boxes. Here is the copier of an alleged libel paying 400*l.* damages for a passage for which the original author has been doomed to the remuneration of one farthing! There cannot be greater satire both on law and practice than such inconsistent results; and it is impossible to look with much complacency on the authority presiding over tribunals where such discrepancies take place. We can speak feelingly, for it is only a few months ago since we were cast in 80*l.* for copying an innocent mis-statement of matter of fact from a morning paper, while the said morning paper was only cast in 40*s.* for the original. All this is exceedingly bad, and opens a door to a species of pettifoggery and management of the worst description—meaning those very low attempts to mystify fact and principle, which, when carried to a certain extent, form the opprobrium of the bar, and never more so than when they succeed in stultifying very stupid people into decisions incompatible not only with justice, but with common sense."—*Globe*, June, 29th.

"LONDON MEDICAL AND SURGICAL JOURNAL.—*Renshaw and Rush, Strand*.—This weekly publication, which is under the skilful editorship of Dr. Ryan, has been more than once noticed in our Journal for its able exposures of the tricks of Cholera hunters, and its fearless animadversion on the blunders of the Board of Health. The curious circumstance of a verdict, with 400*l.* damages, being given against its Editor, on Tuesday last, for copying an alleged libel from *The Lancet*, when, in an action against *The Lancet*, tried on the preceding day, only one farthing was given for the same libel, has brought Dr. Ryan's work more generally under the notice of the public. Now, as it is evident that our friend the Doctor, has been unjustly dealt by in this case, since he has been adjudged to pay 400*l.* for merely reprinting the statement of a contemporary, while that contemporary succeeded in convincing a Jury that the very statement in question deserved mere nominal damages, we feel inclined, as being constantly liable to similar injustice, and, as

public writers of course hating actions for libel, to assist an oppressed brother of the "grey, goose quill," by offering our testimony, which we can honestly do, in favour of the general merits of *The London Medical and Surgical Journal*. The work treats of subjects, be it remembered, that are interesting to every man, while, from the known skill and experience of Dr. Ryan, it is particularly deserving of the support of the profession. In our opinion this Journal is, of all other works of the kind, the most decidedly independent. It has no mercy upon quacks of any degree. With this praise, which we confidently assert to be well-deserved, we proceed to extract, for the information of our readers, from the Number published yesterday, an authentic case of that awful and much-disputed visitation, the spontaneous combustion of the human body owing to an indulgence in the destructive habit of drinking large quantities of spirits. It will be seen that this case is attested by a living witness."—*Weekly Dispatch* July 1.

"THE GLORIOUS UNCERTAINTY."

"Law is every where the same, that is, there is no sameness in it except its uncertainty; nor are fluctuating and variable judgments by any means confined to Scotland. *En voici un exemple*. Some time ago, an article appeared in *The Lancet*, imputing to a Dr. Ramadge unskillful and improper treatment of a patient. This imputation the doctor considered as a libel, and brought his action accordingly. At the trial Mr. Wakley pleaded his own cause in person, and the jury gave the doctor one farthing by way of compensation for the damage sustained by his professional reputation. But the matter did not stop here. Dr. Ryan having copied *The Lancet's* article into the *Medical and Surgical Journal*, and appended a comment such as it was naturally fitted to call forth, was also proceeded against for libel, and another jury condemned him to pay 400*l*. Can there be a more impressive illustration of the beauty of jury trial in civil causes? Two gentlemen are proceeded against upon similar grounds, and while the one is subjected in one farthing damages, the other is condemned to pay four hundred pounds! We quote this case, not to console blundering functionaries among ourselves, but as one of a hundred cases which might be produced to show that the value of jury trial in civil causes has been prodigiously over-rated, and that it is for the most part an instrument of great injustice, either through defect or excess in the verdicts."—*Caledonian Mercury*, June 30.

"*Good times for the Lawyers*. The late trials for libel are likely to produce more work for the lawyers. Dr. Ryan considering that he is hardly dealt by, to be fined so much more heavily for copying, than others were for originating the statement complained of, is expected to move for a new trial; and Dr. Ramadge is likely to do as much for the first

case, on the ground that the damages were insufficient, and the verdict both at variance with the evidence and the charge of the Judge.

"*Who shall decide when doctors disagree?*"

This often repeated question seems likely to remain as great a puzzler as ever, if we may judge from what has lately transpired. A jury on Monday undertook to decide between Dr. Ramadge and another medical gentleman, and gave the former one farthing only. On Tuesday another jury ventured to decide the same question between Dr. Ramadge and Dr. Ryan, and gave 400*l*. to the plaintiff. It is thus clear that there may be awful varieties of opinion.—*Sunday Times*, July 1st.

Mr. Wakley defended himself in person. He entered at great length that the account complained of, in no respect overstepped the latitude of fair and justifiable criticism. The jury expressed a strong desire to deprive Dr. Ramadge of his costs—they gave him a farthing damages. On Tuesday Dr. Ramadge brought an action against *The London Medical Gazette* (*Medical and Surgical Journal*), for copying the libel from *The Lancet*, with some insignificant remarks, and the jury gave him £400. damages. Oh, excellent palladium of British Liberty!"—*Spectator*, July 1.

"The uncertainty of the law of libel has been finely caricatured in a trial against Dr. Ryan, the editor of *The Medical and Surgical Journal*, for reprinting an article against a medical man; upon a minor offence he has had damages of £400. awarded against him, though there was a verdict for only one farthing against the original publisher of it in *The Lancet*. So much for the glorious law of libel."—*Dublin Comet*, July 1st.

To common sense it would seem that *The Lancet* ought to be visited with the heaviest punishment; it was the original offender, and for aught that appears its insertion of the libel induced its further circulation. What then caused the difference in the amount of damages? Certainly the mere fact that the *London Medical and Surgical Journal* attempted to prove the libel to be true cannot satisfactorily account for that circumstance, and to attribute it to the different modes of conducting trials would be a gross reflection either upon the court or upon the jury. The matter is altogether so strange and independent of reason, that it can only be rendered more remarkable by no further proceedings respecting it being attempted.—*Old England Newspaper*, No. 12, July 1st.

All men, in and out of the profession, and all the newspapers, denounce the verdict for 400*l*. *versus* the verdict against the first libeller for one farthing. The above extracts from the newspapers prove the truth of this position. Every man says there should be a new trial, and a new trial there shall be if the law allow it.

M. R.

MR. COSTELLO'S SECOND LETTER
TO THE PRESIDENT OF THE ACADEMY
OF SCIENCES OF PARIS.

SIR,

I SEE in a journal (*The Temps*), which gives an account of the sitting of the Academy of the 4th inst. that I am accused of having given an unfaithful relation, of an operation of lithotrity performed by M. Heurteloup, by means of an instrument, of which he styles himself the inventor, and which he designates by the name of the *curved percuteur and hammer*.

This accusation is sustained by a certificate from Messrs. Hume and Brodie; this I consider to be a serious charge, for no person can entertain a greater respect than myself, for any thing that emanates from these justly respected and eminent individuals. This certificate states *that in the case of Colonel Rankin, "there was by no means question of extricating from the bladder of this patient a broken instrument; that merely the branches of the percussion instrument had been separated to the extent of about three lines, and could not be closed."* I confess, Sir, I cannot comprehend why the reproach for infidelity in my account of the operation should be addressed to me, for I distinctly stated the account was not mine, and I did not make mention of a broken instrument. Now it is obvious that to merit such an accusation, a contradiction must exist between the certificate of these gentlemen, and my relation; such a contradiction will be sought for in vain in my letter to the Academy!! I have stated precisely what Messrs. Brodie and Hume have certified. I did not state that the instrument had been broken in the bladder, but that it had been bent to such a degree, that it could not be withdrawn without making an incision in the perineum. It is of little consequence that the derangement was but to the extent of three lines only. It will be recollected that this instrument is of such a size as to fill up the urethra completely, and consequently that the necessity of withdrawing it

by an incision in the perineum, was as great for a deviation of three lines, as if it had been bent to the extent of an inch.

So much for the principal fact of the certificate; now allow me to add that I cannot divine the object for which it has been invoked. Assuredly M. Heurteloup cannot have any wish to conceal from the Academy, notwithstanding his candidateship for a prize, that, which every one knows here. In the account which I had the honour to transmit to you, I confined myself strictly to what had been told me by a highly scientific and honourable man, if I had allowed myself to be led away by mere rumour, or hearsay accounts, I should also have spoken of instruments broken in the bladder. But I did not do so. I did not attribute the death of the patient to the instrumentation to which he was subjected in the hands of M. Heurteloup, I merely stated the facts, without interpreting them; all I said was that the loss of blood was very great, that the patient had been a long time on the table, and that he subsequently died; and all this is true. I repeat and confirm it on the authority of a celebrated surgeon who had been called in consultation on this case, a man whose name is European, and whose talents as a surgeon and physiologist are universally recognized; I did not criticise the conduct, nor impute any thing in blame personally to M. Heurteloup; on this occasion, I merely spoke of an instrument which he considers a good one; I expressed a contrary opinion, and I gave my reasons for that opinion; I carefully drew a distinction between the individual and the thing, and of the former I spoke with respect; of what use then was the certificate? The fact exists, and as I stated it: If any one had a right to complain, it was I, since my confrère assured you, that he had operated with success with the percussion instrument on two patients, on whom I had made fruitless attempts; a statement which was incorrect, as I have proved it to be,

In my former letter I asserted that this instrument was not new, and I quoted in support of my assertion the name of Dr. Fisher. Another proof that this instrument was not invented by M. Heurteloup, has since come to my knowledge. Weiss, a cutler of London, made this instrument in 1824, for breaking up calculi in the bladder, for Mr. Fletcher of Glamorganshire. He has shewn me the instrument which he then made, and the only difference which exists between the two instruments is, that Weiss's acts by means of a screw which advances the anterior branch gradually on the foreign body; this movement being; effected by turning the manual portion of the instrument on its axis, while that of M. Heurteloup acts by a process more violent, and less safe, that of percussion. In the former, namely, pressure gradually exerted, if the calculus does not yield, the operator may, without having incurred any risk, release it from his grasp and withdraw the instrument, the circumstance as far as the patient is concerned, being the same as before; in the latter, namely percussion, the operator has no choice, something must yield, either the stone or the instrument: the result no longer depends on his will, for while he fancies the stone is yielding, it may be that the branch of the instrument is merely bending. The case of Colonel Rankin is a proof of this.

Which of the two would a prudent man prefer, that which in the case of non-success would not render the circumstances of the case worse, or that which would risk all for all, even while he could avail himself of an alternative, the safety and efficacy of which were confirmed by oft, and oft repeated experience?

The curved instrument of the Danish surgeon Jacobson, composed of two branches, which acts by pressure, is in my opinion preferable to the percussion instrument, and yet this instrument is scarcely applicable but to small and friable stones.

The manufacturer Weiss assured

me that M. Heurteloup had copied his instrument, and that he acknowledged to him he had done so. Has M. Heurteloup been equally candid with the Academy?

If M. Heurteloup can lay claim to any merit in this matter, it can be only that of having proposed percussion with a hammer, instead of pressure with a screw. If it be a merit (and that is the entire question,) I shall grant it to him willingly; what matters it to me, whether it be M. Heurteloup, or M. Civiale, or any other person who is the author of an operative process which really possesses advantages over that which has been already so usefully and so extensively employed? I can use it, surely as well as they. All I desire is, that these advantages shall be real, and well established, not chimerical and full of risk, and that at each announcement of a new instrument, or a new process, we may not have to deplore some new experimental mishap produced by this mania of innovation. Lithotrity encounters sufficient opposition, not to augment the force of it by misfortunes, and it is only because I feel a proper anxiety to protect it against such occurrences, that I take part in this discussion. I entertain no feeling of hostility towards M. Heurteloup personally. If M. Civiale had proposed this process, I should have made the same objections to it; nay more, if my own brother had been the author of it, I should have acted in the same manner, for it is the duty of every conscientious surgeon to oppose the personal interests, even of his dearest friends, whenever he believes them to be contrary to the interests of humanity and science; knowledge produces good actions, and I respect it as earnestly as I abhor empty disputes.

M. Heurteloup perhaps imagines, that we are not on an equal footing. He calls himself the inventor of many things, while he is pleased to qualify me merely as *a surgeon who undertakes this branch of surgery*. Does he not know, or does he wish not to

know, that during the last six years, I have made in the lithotritic apparatus, useful modifications, some of which will remain in the science, when others more vaunted will have been forgotten ! If I have said little on the subject of these modifications, it is because, first of all, I desired to be myself convinced of their importance, and that, by experience, before I made any effort, for the sake of mere empty fame, to impose that belief on others, whose conviction could be obtained by words. Being myself animated with the desire of doing good, I also followed with interest the labours of others, even of persons not connected with our profession, consequently I could not overlook those of M. Heurteloup. I do not wish to say any thing disobliging to him, but I am compelled to remark, despite of all the fine promises of improvements in the apparatus, or ameliorations in the manual work of lithotriety, that it is still in the same position in which M. Civiale has placed it. It is an error on his part, to suppose that he is the only person who has aimed at improving. I belong also to the *party of the movement*, and as soon as any amelioration shall really be established, I shall applaud it as readily, coming from him, as from any one else.

I persist in my objections against this instrument; they are, 1st, the difficulty of properly seizing and fixing the stone; 2d, if the stone be placed obliquely with respect to the branches, the anterior branch, against which the maximum of force is directed, is liable to be broken or bent, by the shocks of the hammer, the occurrence which took place in the case of Colonel Rankin; 3d, when the stone is held fast in the instrument, it, or its fragments may be made to fly by the shocks of the hammer with such violence, as to contuse or wound the bladder.

My letter was already too long, perhaps, when it occurred to me, that as a certificate had been forwarded to the Academy for M. Heurteloup,

your learned assembly might now require some further attestation than my own words in support of what I have stated. In consequence, I waited this morning on Sir Charles Bell, the surgeon to whom allusion is made in the beginning of this letter. I read to him my first letter to the Academy; I recalled the conversation which I had with him concerning this patient, after which he observed, "Your account is a correct one, what I said on this subject was uttered in conversation with yourself, and not in opposition to Mr. Brodie. This, (said Sir Charles) should be stated to the Academy." He then added, let me recapitulate the circumstances. It was presumed that something had gone wrong, when it was found that the instrument could not be withdrawn; it was, however, drawn into the prostate; but it was impossible to carry it through the bulb of the urethra. In that situation M. Heurteloup cut down on the instrument. The artery of the bulb was divided and bled profusely; the branches of the instrument were made to project through the wound; they were then pressed together by a strong forceps, and withdrawn through the urethra; after which Mr. Brodie proceeded to perform the lateral operation, and extracted the stone. The loss of blood, and the shock of two operations, were more than the patient could bear. The symptoms which preceded his death, were those of extreme debility; in a word, he died in the same way as we see persons who have lost a great quantity of blood. His death took place, as well as I am able to recollect, about the fourth week after the operation."

This is the statement which Sir Charles Bell made to me this morning; I have endeavoured to give it as nearly as I could in the very terms he employed. He has given me full permission to support the statement I made to the Academy with all the authority of his name, and I do it with the greater satisfaction on this account, that his honourable character

and brilliant reputation are known to you, and that what he states does not clash with the certificate of those honourable men which M. Heurteloup has caused to be presented to you.

I am not now in the habit of writing French; this I hope will be an excuse for any obscurity in my language.

I have the honour to be,
Monsieur Le President,
Yours, &c.

WILLIAM B. COSTELLO.

London, No. 7, Parliament-st.

June 15, 1832.

CASE OF RUPTURE OF THE UTERUS;

WITH REMARKS,

BY THOMAS RADFORD,

Senior Surgeon to the Manchester Lying-in-Hospital and Dispensary for the Diseases of Women and Children.

HANNAH SPEED, of Back Blakely-street, aged 39, rather tall, and very thin, of a swarthy complexion, occupied as a clear-starcher, of extremely industrious habits, and pregnant of the ninth child. Her health during pregnancy had been tolerably good, with the exception of slight stomach complaints, which were, most probably, produced by the uneasiness of her mind as to the certainty of the fatal event of her expected labour.

Mrs. Upton, midwife, was summoned to attend her at 11 P.M., January 28, 1831, and was told that the liq. amnii had escaped. Upon making an examination per vaginam, she could not discover any dilatation of the os uteri; she therefore left her, desiring to be sent for again, as soon as the pains came on. The day following, at 4 P.M., Mrs. Upton called (not having received any message), and the report made was, that the patient was much the same, but that less water was dribbling; no examination was made. At 9 P.M. of the same day, her attendance was again requested. On her arrival she found

that the pains were apparently strong, but considered them as more the result of voluntary effort than uterine contraction; and this opinion was corroborated by the unchanged condition of the os uteri. As her belly was extremely pendulous, Mrs. U. placed the patient on the horizontal position, enjoining her to avoid all voluntary effort. Her skin, during the whole progress of her labour, was rather cold; but the midwife judiciously applied hot bricks to her feet, hot napkins to the belly, and gave her warm diluents to drink. Notwithstanding the injunction laid upon the patient, as to the necessity of preserving the horizontal position, she would get out of bed and bear her pains upon her knees, from which position suddenly starting she threw herself upon the bed; this was frequently repeated. At a quarter before 11 o'clock Mrs. U. again made a vaginal examination, when she found the os uteri dilating, and the head entering the superior aperture of the pelvis. The husband of the patient became anxious to have another opinion, and a message was sent to my house. My pupil, Mr. Bryden, went down to see her, and upon his return reported, that every circumstance connected with labour were favourable, and that he had no doubts as to the propitious termination of the case. About half-past 12 she was seized with vomiting, which was accompanied with great coldness of the skin. The midwife requested her to take a little brandy and water, which materially relieved her. After a short time she appeared worse; her countenance became pallid, her breathing was slightly hurried, and frequently interrupted by deep sighs; her pains (which until this period, one o'clock, had continued) now subsided. Under these circumstances the husband was dispatched for me; and during his absence she suddenly rose from the bed, and stood on the floor. She now became faint, sighed and moaned, but was supported by the midwife, who laid her upon the

bed, where she immediately expired. On my arrival I found the event as just stated, and on making inquiry as to her complaints during the progress of labour, was informed, that she had moaned much, but had never uttered any sudden exclamation or shriek. I passed my finger into the vagina, and clearly perceived the head of the child, which had partially entered the brim of the pelvis; and I found the os uteri not more dilated than the size of a dollar. The account received from the midwife was, that no blood had been discharged; and this was corroborated by my vaginal examination, the finger not being tinged with the colour of that fluid. I placed my hand upon the abdomen, and was much surprized to feel two tumors, running parallel with each other, a groove or depression evidently existing between the two, and yet the sensation communicated to the hand was, that they were connected together.

SECTIO CADAVERIS.

The body was examined twenty-one hours after death, in the presence of Mr. Dick, my pupil Mr. Bryden, and Mr. Bird. The general surface presented an ensanguineous character, similar to what is observed as the result of excessive uterine hæmorrhage. On opening the abdomen the peritoneum appeared perfectly free from disease, nor was any fluid discovered in its cavity. The peculiar feeling presented to the hand, upon making an abdominal examination (referred to in a former part of the paper), was now fully explained. The uterus, which was very large, formed one segment of the tumor (*viz.* the left), and the child's body, covered by the peritoneum, the other. Upon making a very careful examination of these parts, not the smallest laceration was discoverable in any part of the peritoneal covering; an incision was made through this membrane, which exposed the body of the child. It also brought

into view a longitudinal laceration of the cervix, and part of the body of the womb, the remaining portion of this side of the organ being uninjured. The child was then removed, and the head, which had partially entered the brim of the pelvis, was discovered to be hydrocephalic, and of very considerable size.

The uterus, as already stated, was not much contracted; its parietes were softer than I had ever before witnessed in cases of laceration. The edges of the wound were ragged, but no appearance of bruise or tendency to gangrene was discovered. There was only a small collection of coagulated blood found in the cavity of the womb, amounting to three or four ounces; but under the peritoneum, and anterior to the body of the child there was a diffused clot, thicker in some parts than in others, according as it was situated on a prominent or hollow part of the fœtus. It, in quantity, would most probably amount to twelve ounces.

The lowest portion of the cervix, and os uteri, were not implicated in the rent: the placenta was situated on the left side of the uterus, to which it was completely adherent. The pelvis, on examination, was found of standard dimensions. The bladder was empty, but was perfectly entire.

Rupture of the womb during labour, is an accident so fatal in its nature, that it has occurred to few individuals, to witness cases of recovery.* Dr. Denman states, that "in every instance of the kind, which has come within my knowledge, and the number has not been inconsiderable, both have perished." (*i. e.* mother and child).—*Observa-*

* I make this statement advisedly, having a knowledge of all the cases of recovery which have been related in the medical records of this country; and must confess, that if I were led by this evidence, I should be of a contrary opinion. But every person candidly inquiring after the truth must acknowledge, that it is too much the practice to relate successful cases; and, on the other hand, to withhold those of a contrary termination.

tions on the Rupture of the Uterus, &c. page 17.

A similar want of success is detailed in the observations of many of our practical writers—vide Garthshore, in the *London Med. and Phy. Journal*, vol. 8, *Ramsbotham's Practical Observations on Midwifery*, &c. &c. &c. It was this extreme fatality which induced Dr. Denman to modify, in a distinct essay upon the subject, the practice, which he had advised in his larger work on midwifery—vide his *Introduction to Midwifery*, pages 80 and 81, and also his essay, intituled, *Observations on the Rupture of the Uterus*, &c. page 18. An ample critique on these opinions, will be found in *Dr. Dewees' Essays on various subjects connected with Midwifery*, pages 203 and 204, and 225 and 226.

As the opinions of Dr. Denman (who is deservedly esteemed an authority of the highest rank), are so contradictory in themselves, on a subject of such great importance, as the treatment proper to be adopted in cases of rupture of the uterus, it is desirable to accumulate all the evidence upon the subject which can possibly be obtained. The relation, therefore, of fatal cases, and particularly where the bodies have been examined after death, by extending our knowledge of the circumstances attending rupture, may lead to inferences equally important with those deduced from cases of successful termination.

The records of medical science furnish no case bearing the least analogy to the one here detailed; and, indeed, the possibility of such an event as rupture of the womb, and an escape of the fœtus from its cavity, without passing through the peritoneum, has been denied. In making this statement, I am aware that writers speak of cases in which the muscular structure of the uterus is lacerated, without involving the peritoneal coat. Dr. M'Kerver, in his *Essay*, page 12, says, "Besides, that in those cases where the perito-

neal covering of the uterus and vagina has escaped laceration, the abdomen will continue to preserve nearly the same external configuration which it had prior to the accident. It is quite evident that Dr. M'Keever, in his enumeration of symptoms, refers only to the integrity of this peritoneum, not supposing that it was possible for the child to escape, as he states that the abdominal tumour nearly preserved the same internal configuration; but in the above related case it was otherwise. Dr. Dewees, in his *Essay on the Rupture of the Uterus*, has assumed the possibility of such an occurrence,—but it is mere assumption, as he produces no evidence. In the essay alluded to, he has laboured hard, to prove the necessity of delivering in all cases of ruptured uterus, and of not trusting to the efforts of nature, as advocated by Drs. Hunter, Denman, &c. To accomplish which, he has analyzed two British cases. The first, related by Dr. Bell, in the 2d volume of the *Medical Commentaries*, p. 72, intituled, "The History of a case of two Fœtus, that had been carried near 21 months, and were successfully extracted from the abdomen by incision." The second, published by Dr. John Simms, in the *Medical Facts and Observations*, as, "An Account of a Ruptured Uterus." In the analyses of these papers, Dr. Dewees has taken great pains, to show that the child never passed into the peritoneal sac, a result which, by the authors themselves was believed to have taken place; and which opinion, I must confess, I should receive as true, on reading over the papers with an unbiassed mind. But Dr. Dewees, in his version of the statements of these authors, had a point to establish—he was anxious to overthrow the doctrine of trusting to the natural resources. He says, "The peritoneum is never, we believe, lacerated in the human subject with entire impunity; and the more especially where the wound will admit the external air into the

abdominal cavity. We must, therefore, successively regard the rupture of either the uterus or the vagina as an accident of extreme danger. This we are fully prepared to admit; but this concession does not amount to the abandonment of all hope of recovery from these accidents; for we are fully persuaded that there is no mistake in the cases related by the respectable authorities we have quoted. And we are further persuaded that we should have had more instances of recovery upon record, had these cases of ruptured uteri been judiciously treated, or had they always been under the control of those who would have acted with that promptitude (which) the exigence required." And again, " Danger, in cases of the kind we are considering, is not always commensurate with the apparent extent of the injury. Hence the fatal termination in cases where the injury appeared slight, and complete recovery where hope was almost instantly abandoned."—(pages 220, 221.) Although I am willing to allow Dr. Dewees full latitude for the correctness of his opinion, as to the sensibility of the peritoneum, yet I must confess this alone will not warrant him in the deduction which he has made; and in order to give cogency to his reasoning, it will be necessary to admit, that rupture of the uterus, not involving the peritoneal coat, may take place, without seriously, or, indeed, only slightly affecting the vital powers. We find, indeed, that he says, at page 243, " Should the rent stop at the peritoneal covering of the uterus, we have reason to believe that the symptoms will not only be much milder, but that the woman's chance of recovery will be much greater."

Facts are the most legitimate sources whence to derive practical deductions, and if we have recourse to them in our present inquiry we shall arrive at the inference, that the muscular structure of the womb cannot suffer laceration, and the vital functions remain undisturbed. Two cases of extensive laceration of the

muscular structure (not involving the peritoneal coat), have happened in my practice: one the subject of this narrative, and which proved fatal immediately, the shock received by the nervous system being so great, as instantaneously to extinguish life; a result which I have never before known, notwithstanding that my long connexion with an extensive Lying-in-Charity has furnished me with frequent opportunities of witnessing instances of lacerated uterus. The other case alluded to proved fatal in sixteen hours after the occurrence of the laceration. In contemplating the frequent fatality of cases of laceration of the womb, we are led to inquire whether there are no symptoms which shew themselves, as universal precursors of this most dreadful catastrophe? and if there are, are we possessed of the means of prevention? The answer to this is, that at present we are not in possession of that knowledge which would warrant us in adopting measures requisite to accomplish this object. If we were to act upon our limited knowledge of the preliminary symptoms, the catalogue of mortality would increase more rapidly than if the result were left to the disposal of nature.

In order to possess the means of averting this dreadful accident, it behoves every member of our profession to come forward and detail all the cases, whether successful or unsuccessful, which have or may occur to him; thus, ultimately, facts sufficiently numerous would be furnished, whence deductions might be made, and rules of practice formed.

I was requested by Mr. Robertson to visit a patient, on whom he was in attendance, and who was suffering from protracted labour, arising from distortion. During our preparations for her delivery, she suddenly exclaimed, " Oh! my belly, the cramp in my belly!" I immediately made an examination, and detected a laceration extending partially through the substance of the womb. This circum-

stance I pointed out to Mr. Robertson, and he fully corroborated the fact on making an examination. We effected an immediate delivery with the perforator and craniotomy forceps, and fortunately the woman recovered. We were induced to accomplish the delivery more expeditiously, in this case, than we might have considered necessary, if our attention had not been awakened by her sudden exclamations.

It will be quite obvious to the reader, from the facts of the case of Hannah Speed, that there will be no great difficulty to attribute the result to its proper causes. The pendulous state of the abdomen, and consequently the altered axis of the womb; the hydrocephalic enlargement of the head; the early evacuation of the liquor amnii; the position of the woman, who in kneeling had the trunk bent forwards during the action of the womb; and shall I add, a softening of the uterine structure?

The perforation of the foetal head (which was discovered only by the *post-mortem* examination to be hydrocephalic) might, in all probability, have led to a more fortunate issue; but, during the life of the patient, this fact was not known. Speaking of the hydrocephalic head, it may be proper to state, that its existence is not so easily ascertained as some writers would lead their readers to believe; three cases of this description have come under my observation, and yet the indications which are stated to characterize this condition of the head were absent in all.

I should have extracted the child, by an incision through the abdominal parietes, if I had been with the patient at the time of her death; but my absence, and other circumstances, induced me to defer the investigation until a more favourable period.

THE

London Medical & Surgical Journal.

Saturday, July 7, 1832.

RAMADGE v. RYAN.

WE have given a verbatim account of the evidence in the above extraordinary trial, arranged from three different copies of stenographic reports taken on our behalf. We have abridged the speeches of counsel, as some of these were replete with mere assertions and assumptions, and could not be interesting to our readers. We confidently submit the report to the profession, and we leave them to decide upon the justice or injustice of our case, and upon the question whether our criticism exceeded the limits of truth and fairness. In order to save the time of our readers, we shall give an abstract of the facts of this case.

Dr. Ramadge's letter in the *Sunday Times*, appeared the 10th of April, 1831. He called upon Dr. Ryan in two or three days afterwards, when the latter expressed his deep regret at the publication of the letter, and told him, that as he attacked the brightest ornaments in the profession, living and dead, he must expect the disapprobation of his contemporaries. This prediction was fulfilled by his expulsion from the Medical Society of London in May. Now it is important to remember that Dr. Tweedie refused to consult with him in July, in the case of Miss Bullock; the *Lancet* published the transaction in August, after having ascertained

from Mr. Bradford, the attending apothecary, that it was true, and Dr. Ryan having ascertained this fact, and likewise from Dr. Tweedie, through Mr. Hughes, of Holborn, that it was substantially true, inserted the same article in September, omitting the teaspoonful doses of calomel. Mrs. Reynolds, the sister of the patient, also asserted that it was true in every part, except the recovery of her sister. But it was stated in the *Lancet*, in August, she was recovering, and the only inference that could be drawn a month afterwards was, that she had recovered.

Dr. Ryan having ascertained that she did not recover, apologized in his October Number, and offered to insert any explanation or comment from Dr. Ramadge, which he might deem necessary,—which offer was declined. Did this proposal, and the exclusion of the teaspoonful doses of calomel, shew malice, or *malus animus*, on the part of Dr. Ryan? Was he morally or legally responsible for the expulsion of Dr. R. from the Medical Society in May, for the refusal of Dr. Tweedie? In July, or for the hostility of the great community of the medical profession then or now against Dr. Ramadge? It would be manifestly absurd to say that he was, and yet this was the point most strenuously urged against him at the trial, and not what injury he individually had done Dr. Ramadge, by the publication of the alleged libel in the *Medical and Surgical Journal*.

It is also right to state, that the old series of this Journal was limit-

ed in circulation, was strictly scientific, and was not read by a single person out of the profession, so that it could only injure Dr. Ramadge with the profession; while the *Lancet*, which was read in every Coffee-house, and by every class of society, and at that time had a much larger circulation than this periodical, must have done the reputation of the plaintiff a thousand times more injury than *The Medical and Surgical Journal*; yet Mr. Wakley was reluctantly fined a farthing, and Dr. Ryan £400. Is this impartial justice? The British public exclaim no! The medical profession are of the same opinion. All declare that there must be a new trial, and there will be one, if the law allow it. There are some other curious facts in this cause, which must prove highly instructive to jurors.

A compromise was offered by plaintiff, 40s. damages and the costs; but this the defendant was advised to refuse, as the article complained of could not and did not injure the plaintiff a thousandth part as much as the exaggerated one in *The Lancet*, and therefore he could not be fined, the verdict must be for him; but the jury decreed in their wisdom that Dr. Ryan should pay £400. for the minor offence, and thus gave a splendid and imperishable illustration of “the transcendant privilege of Englishmen,”—trial by jury in civil cases. Had the decision in this case been made by an equity judge, Dr. Ryan would not have been mulcted more than Mr. Wakley, and most proba-

bly not so much. Trial by jury is invaluable in government and criminal prosecutions, but it has been attended with such discrepant, inconsistent and unjust effects of late in civil cases, that the legislature is loudly called on to modify this mode of investigation. When we consider the qualifications of jurors in general, we must at once perceive the total incompetency of the largest proportion of them. They are in general men who have acquired wealth by various pursuits, who have retired from business, and reside in respectable situations, but whose general knowledge, from the contracted spheres in which they have moved, is not sufficient to enable them to distinguish proof from assertion, truth from falsehood, and sometimes not even the broad basis of common justice.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

IN your interesting periodical of the 12th of May, I observe you notice an essay of Dr. Montgomery's on "spontaneous amputation of the limbs of the fœtus in utero, with an attempt to explain the occasional cause of its production,"—you say, he relates a case in which distinct threads of organized lymph were passing from the hands to the legs, and causing constriction so tightly as to prevent further development; and that he is *inclined* to believe that the limbs would have been spontaneously amputated had the process continued.

This reminds me of a case which occurred at the Westminster Lying-in-Hospital in the year 1805. I attended there as a pupil under the late Dr. Thynne; and on the 15th of April was called to attend a young

woman of her second child; it being my first case, Mrs. Blenkinsop the matron was present. The presentation was natural, and the labour unattended by any difficulty; but the child, a female, had but one leg, the other limb exhibited positive proof of having been spontaneously amputated some considerable time previously to the mother's admission into the hospital, the stump being partially healed about an inch and a half below the knee. Dr. Thynne examined the limb, but did not endeavour to account for its division. The infant was born dead; the woman did well; but the amputated portion of the leg never appeared. Should you consider this case in anywise illustrative of Dr. Montgomery's ideas, it is at your service.

I am, Gentlemen,

Your's very obediently,

TYSON WEST,

Alford, Lincolnshire,

June 30, 1832.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Meeting at Oxford.

AT the meeting of this Institution last year, it was decided that the second assemblage should take place at Oxford, and that the business should be conducted on the same plan, namely, that provisional sub-committees should be formed, in which reading of dissertations, oral communications, and discussions should take place, whilst lectures should be delivered before the general body, at stated periods. On Monday, 18th ult. the business of the sections commenced, they were divided into four classes—1, mathematic and general physics; 2, chemistry and mineralogy; 3, geology and geography; 4, natural history. On Tuesday, Professor Airy read in the Clarendon building, a paper "on the state and progress of astronomical science, in reference particularly to scientific astronomy, and Professor Wheevely on the means of calculating the time and height of high

water;" after which Dr. Shuttleworth and the Fellows of New College, gave a splendid entertainment to the members of the association; and on the following morning they assembled in Exeter Hall, where the Vice Chancellor, Dr. Jones, gave a breakfast, after which an adjournment took place to the Clarendon, where the time was occupied in the sections in the way proposed. On Thursday a convocation was held, at which, amidst the loud plaudits of a distinguished assembly, the degree of Doctor in Laws was conferred on Sir David Brewster, Faraday, Dalton, and Robert Browne; the association then divided itself into two parties, the one following Dr. Buckland on a geological expedition in the neighbourhood of the University, the other Dr. Henslow on a botanical excursion. The evening and the two following days were occupied in the reading of papers and the delivery of lectures—Mr. Ritchie on the recent discoveries in electro-magnetism; Dr. Turner an introductory lecture on chemistry; Professor Willis on sound; Dr. Buckland on fossil remains; and Professor Sedgewick on geology. Medical science seemed to be completely neglected, nor was any attempt made to form a section for the numerous professors of the healing art who had joined the institution. The branches of chemistry, and of natural history, were not such as are connected with medicine; indeed, the greater portion of the time was devoted either to the mathematical and physical sciences, or to geology. The arrangements were altogether very imperfect, and evidently require the aid of better managers. The meeting for next year is to take place at Cambridge, and Professor Sedgewick is elected President.

BOOKS.

THE Medico-Chirurgical Review for July.
The Edinburgh Medical and Surgical for July.
The Dublin Journal of Medical and Chemical Science for July.
A popular and impartial Estimate of the

present Value of Vaccination, as a Security against Small Pox, and of the Danger of encouraging or tolerating the Inoculation of the latter. By SAMUEL PLUMBE, M.R.C.S. &c. 8vo. pp. 97. London, 1832. Renshaw and Rush.

An Essay on the Deaf and Dumb, shewing the Necessity of Medical Treatment in Early Infancy; with Observations on Congenital Deafness. By JOHN HARRISON CURTIS, Esq. Surgeon-Aurist to the King, &c. 8vo. pp. 211. 1829. Longman and Co.

NOTICES OF CORRESPONDENTS.

A Constant Reader.—An apprentice is allowed by the Hall to attend lectures the last year.

A. B.—The half-sovereign has been forwarded to Whitecross-street prison.

A Lady has forwarded 5s. for the same object.

Our Nottinghamshire correspondent is right, but he has seen that the Trial against us prevented attention to the matter.

Crito.—A stupid fool may write as he pleases, he is unworthy of notice.

A correspondent requests us to state that Mr. Brodie recommends a ligature in internal, and excision in external hæmorrhoids.

E. G.—There is no use in consulting lawyers unless their advice is followed. Never did counsel or solicitors act more energetically for their client. The decision is due to the jury only, who, though the plaintiff offered to take 40 shillings damages, which would entitle him to his costs, gave him £400. instead. Such is a specimen of what Blackstone calls "the transcendent privilege of trial by jury."

Dr. Collins's paper cannot be inserted; the intimacy is not that supposed.

The members of the profession, who consider the damages awarded in the case of Ramadge v. Ryan excessive, have commenced a subscription to enable the defendant to apply for a new trial.

SUBSCRIPTIONS RECEIVED.

	£.	s.	d.
Dr. James Johnson	10	10	0
Dr. Uwins	2	2	0
Dr. Tweedie	5	5	0
W. B. Costello, Esq.	5	5	0
A. C. Hutchinson, Esq. ...	2	2	0
J. P. Holmes, Esq.	2	2	0
Greville Jones, Esq.	2	2	0
—Skey, Esq.	2	2	0
A Naval Surgeon	2	2	0
J. Foote, Esq.	1	1	0
Dr. Harrison	10	10	0
Dr. Blicke	5	5	0
Morgan Austin, Esq.	2	2	0
A Dresser of St. Bartholomew's Hospital	2	2	0
E. L. Devonald, Esq.	1	1	0
B. Reilly, Esq.	1	1	0
Alex. McNab, Esq.	1	1	0
M. D.	2	2	0

London Medical and Surgical Journal.

No. 24.

SATURDAY, JULY 14, 1832.

VOL. I.

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,
During the Session of 1831-32;
BY BARON DUPUYTREN,
PRINCIPAL SURGEON OF THAT HOSPITAL.

CARIES OF THE SPINE.

Fistulous passages—symptomatic Abscesses.

ABOUT two months since a woman was admitted in the Hôtel-Dieu, for an abscess situated at the upper and inner part of the thigh. She was also affected with spinal disease. You are aware that the spinal marrow is never compressed, when the curvature is not at right angles, and then consequently there is not paralysis of the lower extremities. Such was the case with this patient. The abscess in the thigh burst of itself, and a certain quantity of pus was discharged; a smaller abscess, having evidently the same origin, formed on the other side. It was evident that these two abscesses communicated with the carious bones by fistulous canals. This woman had been treated for three months with preparations of iodine, and she was believed to be cured. The caries however continued to make progress, and she came to require my assistance. Moxas were directed to be applied on each side of the curvature. For a month she appeared to be improving, when she was seized, either from a change of temperature or the absorption of pus, with symptoms of pleuropneumonia. It was in vain that we endeavoured to arrest it by reiterated applications of leeches to the chest, a blister to the sternum, topical emollients, &c. On the 15th of December the patient died, seven or eight

days after the commencement of the pleuropneumonia.

Autopsy, 36 hours after death. External appearances.—Body emaciated, projection of the spinous processes of the 11th and 12th dorsal vertebræ; traces of cupping glasses on the right side of the chest. *Internally.* There were no remarkable appearances in the head; in the chest there was a considerable sero-purulent effusion with flocculi of lymph, and formation of false membranes, the corresponding lung collapsed; in the abdomen were found marks of an ancient peritonitis. The body of the 11th dorsal vertebra was completely destroyed by caries; the spinal canal was not diminished, and the marrow was of a natural appearance. The bodies of the 10th and 12th dorsal were partially denuded, and superficially carious. A vertical section in the antero-posterior direction shewed evident ramollissement; the scalpel penetrated them with facility. In front of the 11th dorsal, the cellular tissue and periosteum were condensed and hypertrophied; they formed a sac with thick resisting walls, greyish internally, in contact with the pus and pseudo-membranes. It was also adherent to the diseased vertebræ by some strong bands. From this sac descended on each side a fistulous track, contained in the sheath of the psoas muscle, the fleshy portion of which was atrophied and discoloured. These tracks were filled with pus; that on the right side is large enough to contain several fingers; it is lined with thick pseudo-membranes, under which is formed a smooth membrane apparently mucous, of a rose colour; it contains badly-formed pus. This track is dilated above the crural ring, contracted under it, and dilated again below it into a large sac at the upper part of the thigh, in which are the minor trochanter and other osseous parts of new formation. With this sac the fistulous opening in the skin communicates. The track on the left side also descends from the vertebral sac, makes its way through the fleshy fibres of the psoas, and arrives on their internal and anterior edge on a level with

the superior strait of the pelvis; thence it passes under the crural arch, and terminates on the internal side of the thigh without dilatation. Its internal surface is greyish, and covered with a mucous membrane of new formation; beneath which there is a whitish, dense, fibrous tissue, which forms almost the whole of the canal; it is formed at the expense of the cellular tissue, through which the pus at first infiltrated. This track could hardly receive the point of the little finger; in some places its diameter was almost capillary, shewing that nature was endeavouring to close it up.

Hunter was the first to describe the formation of these apparently mucous canals.

The fistulæ which establish a communication from a carious bone with any part of the body, those which lead from the urethra to the perinæum, or the neighbourhood of the anus, from Steno's ducts to some part of the face, and those which communicate with the air passages and externally, are all of the same nature, and organization: accidental and anormal, they nevertheless replace the natural passages when destroyed, perforated, or contracted, by giving passage to the matters which previously passed through them.

These accidental passages may be formed at the expense of all the parts with which the pus or deviating liquid may come in contact; thus fibrous, nervous, osseous, and mucous tissues may enter into their composition. This has been sufficiently exemplified by the artificial passages in the case which we have just narrated. In a short time after these canals are formed, and liquids traverse them, they take on the mucous structure. For example, in caries of the spine these canals are organized in the following manner. The caries having commenced, the pus remains for a longer or a shorter period in its neighbourhood, and especially in the cellular tissue; a sac forms in which the purulent matter collects; as this becomes more considerable, the sac enlarges and elongates downwards, on either, or both, sides of the spine; the pus passes downwards, pushing before it the lower end of the sac; if it meets with any obstacle, it dilates; if pressed between any parts, it contracts, and dilates again when the parts are free. Having reached the skin after a course varying in length, it forms a tumour, and terminates in an abscess.

This purulent collection, commonly called *abscess by congestion*, and which I term *symptomatic abscess*, constitutes a very serious disease, and one which is generally considered fatal. Some cases, however well followed up, prove that these abscesses may close and entirely disappear, when the caries is arrested.

Treated actively by issues, moxas, internal remedies, and an hygienic plan of treatment, directed so as to remove the causes producing the caries, it may be arrested, and cured. But will the abscess terminate as happily?

Should it be abandoned to the resources of nature alone, or must surgical treatment be had recourse to? The ordinary process of this disease must be the guide in this respect.

These abscesses remain sometimes in this state for whole years, without causing any bad symptoms; the pus is gradually absorbed, and all traces of it are lost; again, after a longer or a shorter period, the skin covering the abscess may become inflamed, ulcerate, and give issue to the pus, the whole of which may be evacuated, and no more produced. In other cases, the pus has been in the end converted into adipocire; chemical experiments have lately proved that such was the nature of the substance sometimes found in these sort of abscesses.

Many years ago I had a young tradesman, then residing in the Rue aux Ours, and who was affected with a symptomatic abscess, proceeding from caries of the spine, accompanied with curvature; the caries was cured by the reiterated use of moxas, issues, &c. The abscess did not disappear, but it diminished somewhat in size. Four or five years afterwards this young man died from pleuropneumonia. The autopsy shewed the caries completely cured, the curvature remaining; the abscess was changed into a fatty, soft, unctuous mass, presenting all the physical and chemical characters of adipocire, which was also found in parts of the canal; this latter was contracted, and closed in some parts.

I consider it to be dangerous to open a symptomatic abscess resulting from caries of the spine, which has yielded to treatment. If you were to open the abscess, you would risk causing a relapse of the principal disease, and lose the fruit of a long and active treatment; they should be left to the powers of nature.

I have already described the manner in which the fistulous tracks from caries of the spine are formed; we shall now find that urinary fistulæ take place in the same manner. I suppose that the urine accumulates in a sac, and in large quantities; at the end of a certain time an abscess is formed; this opens, and a fistula is the result; the canal becomes lined with a membrane, apparently mucous. We shall now see what are the consequences of the formation of this membrane. If a catheter be passed in the urethra, while the fistula is yet recent, it can be easily cured; but if it is allowed to remain six months, or a year, without having recourse to that measure, then a cure is almost impossible, because the fistula has become organized.

These fistulæ have not, when recent, the characters which they afterwards assume. They generally commence by an abscess, from which, when it opens, pus, varying in its nature according to its cause, will be discharged, either pure, or mixed with some animal secretion; there are very few fistulæ which do not commence in this manner, and they are those which result from wounds in-

flicted on an excretory canal; in this case, the liquid which passes through the wounded canal, follows ordinarily the same course as the instrument which inflicted the injury, and the fistula thus formed has but one course. In the first case on the contrary, that is to say, whenever nature presides over the termination of the disease, the accumulated fluid may make its way by one or more passages. If the abscess is external, the opening may take place directly, and only one canal be formed; but if deeply situated, one only may be formed, or more than one, uniting together ere they open externally: or they may all open separately externally. Such is the first period of the existence of a fistula.

If the track of the fistula is very short, the phenomena attendant on the second period may be very simple; the inflammation ceases; the edges of the fistulous opening become accustomed to the contact of the fluid; they cicatrize without uniting, and the opening becomes permanent. If the abscess is very deeply seated, very remarkable phenomena occur. The parietes contract, but do not adhere; the external opening contracts, becomes rounded, and soon appears as a small red fungus, pierced in the centre by an opening often very difficult to discover, narrower than the canal, of which it is the orifice, and which may furnish a quantity of pus out of all proportion to its apparent size. At the same time throughout the whole extent of the fistula thus traversed by the liquid, an inflammation at first severe is set up, which is communicated to the neighbouring parts, and which gradually diminishes as the parts become accustomed to the irritation of the fluid. Soon, without entirely disappearing, the inflammation yields place to a process, under the influence of which the whole track becomes organized, is isolated, and changed into a real excretory canal, which presents the same characters, in whatever tissue it may be developed; it is most commonly single, sometimes ramifying towards its extremity, sometimes straight, sometimes flexuous and lined, as has been said above, by a real mucous membrane, which indeed can be isolated only in rare cases, but is always to be recognized by its appearance, the fluid it secretes, the organic elements which compose it, and which differs from natural mucous membranes by the absence of follicles and an epidermic layer.

In some cases where the inflammation is passive, the organization of the canal is so complete, that it is enclosed within cellular tissue analogous to that which surrounds the natural excretory ducts, and to which anatomists have given the name of submucous cellular tissue; but in most cases, the irritation continues in the surrounding tissues, and they form larger or smaller indurated masses, surrounding the fistula.

I have said that these accidental canals resemble the natural mucous canals; the ex-

ample we have before us, proves the truth of that which I have advanced. Thus you perceive here a false membrane, analogous to that met with in œsophagitis; by scraping it, this can be removed, and the subjacent membrane is red, like the natural mucous membranes; it is, like them, soft and villous; examined by a magnifying glass, villi may be discovered, smaller than in the natural membrane, doubtless, but still apparent. If this comparison is pursued further, we find, externally, a fibro-cellular membrane, resembling that which surrounds the mucous membranes.

Nature sometimes endeavours to cure these fistulæ, and she does it in this manner:—The canal being no longer traversed by any liquid, the tissues which compose it, endowed with contractility, like all the organic tissues, contract, the parietes are brought in apposition, are united, and form a fibro-cellular cord, which, at the end of a shorter or longer period—six months or a year, in part, or entirely disappears. How can these canals disappear? In the same manner as they are formed; they are formed at the expense of all the tissues which they meet with in their course, taking from them the elements of their organization; they disappear, restoring to them that which they had previously abstracted. The truth of these assertions has been demonstrated by pathological anatomy. In persons who have been cured of symptomatic abscesses, and have died of other diseases, at a greater or less distance of time, the fistulous track has been found converted into a cord, as I have said; in others, this cord was not continuous; parts only were found here and there; and in others again, it had entirely disappeared. The case which I shall now cite, is very remarkable in this respect.

A woman was admitted into the Hôtel-Dieu for a strangulated hernia, which terminated in an artificial anus. No one could deny in this instance that the intestine was adherent to the abdominal parietes. At the end of two years, she was again admitted into the hospital for another disease, under which she died; an autopsy took place; for an instant, I thought myself deceived in my diagnosis, for I could not find any adhesions, but on examining the convolutions, a cord was found extending from the intestine to the superior part of the crural arch, thus verifying my opinion, that in many similar circumstances, these accidental canals restore to the neighbouring parts the elements they had previously abstracted from them.

In the first case, the whole track was much diminished in size, whilst the recent canal was more considerable. The parietes of the first were almost in apposition, containing an albuminous matter, resembling that of false membrane, being the process nature employs to effect the union.

It is true that natural mucous canals are

with difficulty obliterated; nevertheless, positive examples of obliteration are on record. Thus the proposition of Bichat, true in generalities, is capable of exceptions. Accidental canals, on the contrary, are obliterated more readily; the reason is, that the first have a very developed secretory apparatus, while it is little apparent in the latter; thus a square inch of a natural canal will present a hundred villi, while in the same extent of an accidental one, only five or six will be met with.

According to the principles which I have just laid down, the necessity of preventing as speedily as possible the organization of these accidental canals, and of re-establishing the natural course of the secretion by all possible means. But when this effect has not attained, the same measures will become insufficient, and even inapplicable. It then remains only to remove the parts.

Cauterization may then be applied advantageously, but it must be applied over the whole canal. In other cases, weak injections of nitrate of silver—nitric acid may be used, taking care not to pass the fluids in a wrong direction; about twenty, thirty, or even sixty grains of the nitrate of silver in a pound of distilled water may be used, to be injected by a syphon syringe. I have found this injection successful in many cases dependant on scrofula.

ROYAL COLLEGE OF PHYSICIANS.

Monday, June 25, 1832.

THE following Essay was read before a large meeting of the Members of the College, and numerous distinguished and literary characters:—

Cursory Remarks on the present Condition of Medicine, and requisites for a Physician.

By DAVID UWINS, M.D.

I wish, on the present occasion, to state my opinions openly and candidly in respect to medicine, both as a science and an art, as it is cultivated and practised in our own time; and if, in so doing, I may be found to differ from many who do me the honour to listen to the perusal of this brief paper, the very difference itself may in some sort be taken as a guarantee against hasty inference; since, when we oppose ourselves to individuals whose talents and character command respect, we ought well to weigh and sift our persuasions ere we commit ourselves by their exposure.

Medicine cannot be ranked among those sciences which the French call *exact*; neither do its parts hang together in precisely the same connexion as do those which constitute moral and ethical philosophy; ours is, in

fact, at once a science of itself, and a science of other sciences; it is constituted by a mixture of demonstration and inference, and when properly cultivated and legitimately practised, it embraces and brings to its aid many postulates from pure physics, as well as much of moral and ethical truth. But it must be admitted, that upon us precept is less prescriptive—authority less binding—than upon those who practise law, or professionally inculcate religious doctrine; and why? It is because maladies are not essential entities standing out like moral maxims, independent on time, place, and circumstance; but are so interwoven with the constitution of our frames, and so contingent upon external influences, that amidst much of general, there is almost ever something of peculiar; and something, therefore, which makes its final appeal to the individual discernment and independent discretion of the skilful physician.

If this be received as a correct representation of the distinctive character of medical science and therapeutic art, it must be conceded also that the vagueness of terminology which insensibly creeps in among medical institutes ought as much as possible to be guarded against and avoided. Metonymical modes of expression must be shunned with care, and schemes of nosology and nomenclature rendered accordant with the difference—the *essential* difference which manifestly obtains between the arrangements of natural history, the principia of natural philosophy, and the embodying into one whole a series of incidental symptoms, or, I might almost say of contingent and accidental signs. Who is there but must allow that the erudite works of one of our latest writers are marred throughout by supposing classes, orders, and genera of diseases, to be like classes, orders, and genera of plants. That classification is absolutely necessary, and that designating terms are equally indispensable cannot be questioned; but the way in which some of our systematics set about the inquiry of what a disease *is*, and what it is *not*, often amounts to nothing more than a mere logomacy, while it tends to vitiate our inferences by putting the cause in the place of the effect, and by imagining entity and essence where neither can be properly predicated.

But I am deviating from my first intention; the main object of the present cursory strictures not being nosology and nomenclature, but that of briefly inquiring into the actual condition of medicine in these our times,—a question which may not, perhaps, find so easy a solution as at first sight might be supposed. With us, it must be generally known, indeed, it results from the very peculiarity of our calling, consequence cannot always be inferred from sequence. The influenza in Paris of 1802 was much more fatal, for example, than it proved during its presence in London, nearly at the same time; but had

we thence inferred, broadly and largely, that our practical indications were drawn with more distinctness, and our modes of treatment more effective precisely in the ratio of diminished mortality, we might have been subject to the charge of judging too partially or abstractedly, and of not sufficiently recognizing the possible modification of circumstance, an error which has seemed to me to have infused itself into some of our decisions, as to the actual nature, as well as to the mode and measure, of communicable power of the epidemic now present—that contingency and subjection to exterior influence to which I have just alluded, having in my humble judgment, been too much lost sight of by the respective controversialists who have arranged themselves under the banners of contagion on the one side, and of local malaria on the other.

I may, however, remark by the way, that the mysteries and uncertainties which connect themselves with epidemic and contagious distempers, ought to repress our disposition to dogmatic announcement, and induce us to look with complacency upon individual sentiments, how widely soever they may be at variance with our own.

But placing pestilence and its consequences out of the question, surely it will be said by some, the general diminution in the average of mortality during the last half century must most forcibly plead the cause of those speculatists who maintain the rapid march of medical science?

Now, sorry should I be even to insinuate any thing which might bear too hard upon such unqualified assumption, but I am free to confess my feeling, that the assumption demands to be qualified, and that we ought not to overlook medical *polity* while exulting in the progress of therapeutic skill. To resort, once more to the epidemic of the day; we may ask, whether, had cholera been in London a century ago, a vast difference in malignity and diffusion would not have been witnessed, inasmuch as the physical and *moral* preventives of pestilence were not then in existence, and act to any thing like the extent that is now happily the case?

To our present polity and habits are we, moreover, mainly indebted for the decline, and, in some districts, disappearance of a sickness which unequivocally originates in local circumstance, and is regulated by local condition. The very name of *ague* is almost forgotten, even in places where these intermittent forms of fever were not very long since proverbially present. Then, again, what an amazing power has been obtained by man over the depopulating ravages of the specific contagions? Who can calculate or compute the diminution of deaths and deformities, through the whole range of civilized society, by the blessing of vaccination? We must also take into account, the increased intelligence which has made its way into our

nurseries, with all its happy consequences. The comparative sobriety too, and superior tone of moral sentiment which pervade our universities and characterize the habits of our higher and middle classes, may be put down to the score of antidotes against disease; and the whole, I repeat, of these moral advantages of present over former times, ought to be brought into account when we infer the diminution of mortality from an improvement in medical practice.

But the healing art, say some of our youthful enthusiasts, must necessarily have advanced within the very few preceding years, and *that* too with rapid strides, inasmuch as its modes of cultivation have undergone such a thorough change for the better. I wish I could completely accord in sentiment with some of my respected friends and compeers on this particular. Far be it from me to advance a single word by way of disparaging minute and morbid anatomy. Let it not for a moment be inferred, that I deem *that* course of instruction effective which should leave out of its scheme the paramount importance of an assiduous research into structure, as connected with function; but even on this head it is, I think, possible that extent of detail and minuteness of division may be made to usurp the place of commanding principles, so that too much temerity on the one hand, and indecision or littleness on the other, may come to be the consequence, in practice, of considering disorder more of membranous origin, or of too sedulously seeking for some locality as the spring and source of every morbid state.

A German physician, who was upon a visit to Britain about half a century since, expressed his surprise that *gastricism* was treated in this country as rheumatism, and that we set heroically and empirically to work with a *vi et armis* treatment of disorders which, to him, was frightful; “and yet (he adds) somehow or other, these English practitioners are astonishingly successful.”

Were this same individual to come among us now, he would find *gastricism*, and, if I may so say, *membranism*, at work to his heart's content. But whether he would witness more happy results in the way of practice, may, in my judgment, be problematical. I am certain, indeed, of this, that the feebleness with which curative indication has been occasionally pursued, has originated in too high an appreciation of topical circumstance.

It is but a little time ago that I was present at a medical society, where a very ingenious paper was read, advocating and illustrating the theories of tender tissue by an especial allusion to mesenteric atrophy—a disease, the author of the essay contended, invariably to be considered a case of inflammation, or sub-inflammation, of those parts of the alimentary tube at which the lacteal absorbents originate; but whether these parts do or do not become so circumstanced in the majority

of instances, certain it is; at least in my mind, that the condition is often consequential rather than primary, and that a judicious course of invigorating medicinals will, in many cases, supersede the necessity for this nice recognition of topical derangement.

I protest against misconception. I am not an advocate for either theoretical or empirical boldness, at the expense of internal irritation and visceral disturbance. But do let us reflect, that our bodies and systems, although made up of parts, possess a principle of totality. Do let us be content with curing our patients, as Wellington was with gaining the great victory of Waterloo, in spite of its being said in the one case, that the cure ought not to have been effected, as it was in the other, that the battle ought not to have been won. *That* conduct manifests most of the master-mind which makes seeming obstacles bend to commanding principles, and which implies a tact of looking at and through the whole, while men not thus taught or gifted, are occupied with partial and meaner surveys.

It may, perhaps, be allowable here to intimate, that the pathology of the day seems to busy itself too much with tracing the distinction between disorder of structure and disorder of function, especially in application to those maladies which have recently engrossed so large a share of attention. A mixture of both, to a certain extent, may often be present; and all will assuredly admit, that *post-mortem* appearances are not seldom very far from commensurate to our preconceptions, and very wide of satisfaction as to the cause of all the symptoms. Stethoscopians talk much of the light thrown on pulmonary and cardiac pathology by the proper application of their instrument, and I have not unfrequently been satisfied that their boast is well-founded. But is not the information thus acquired, even allowing its general correctness, calculated in some measure to mislead by concentrating our inquiries too much upon one particular point, by leading the mind from general, and functional, and connected circumstance, into a single channel of observation, and by assuming the Alpha and Omega of a complaint to be necessarily lodged upon a particular viscus? Minute and judiciary modes of investigation may not, perhaps, be objected to on the ground of exciting undue alarm on the part of the patient, because it will be said, that a physician's obvious duty is to acquire, at any expense, all the information in his power. But I think I have witnessed an actual augmentation of malady by the multiplication and reiteration of those processes, to an undue extent, which, under proper limit, and in a judicious manner, may materially assist our philosophy, and beneficially regulate our remedial institutes. "*Ne nimis illic luxurietur animus, ne nimis hinc arcescat; tota feré cum sit in eo medicinæ vis, quæ,*

tanquam machinatione aliquâ, moventur artis instrumenta."

I am here tempted to advance still further on debatable ground; and to intimate, that the entire abolition of any distinctive marks between surgery and medicine, which is at the present time contended for, may have in it somewhat of objectionable on the score now referred to. Aware am I, as all must be, that surgery is not only a magnificent, but, inasmuch as it is so, it is also a *pathological* and *medical* pursuit. Truly satisfied do I feel that physiological and therapeutical investigation, in order to be satisfactory and efficient, must comprehend the whole circle of the medical sciences; and I may embrace the opportunity of saying, that the spirit of reform has been most happily excited and diffused among that class of practitioners whose professional learning was formerly limited to a little of technical pharmacy; but I still think that the kind and measure of research which is necessary to due qualifications in the *higher* departments of surgery may prove in a degree, unfriendly to that reflecting, and thinking, and subordinating habit which ought to characterize the physician; and, might I not, by the intimation, render myself obvious to the charge of prejudiced patriotism on a point, where, if on any, national partialities ought to be sunk; I would ask whether we are to look for the ablest *medical practitioners* among the industrious, and ingenious, and meritorious pathologists and surgeons of the continent?

But on this disputable and disputed point, it may perhaps, in this place, be unseemly to enlarge, more especially as one very decided good must result from presuming the practicability, of the union now adverted to, viz. that it will excite to diligence and industry in the cultivation and exercise of all departments of medicine.

There is one other particular likewise agitated in the present times of universal agitation and excitement, which is, whether that prior disciplining of the mind and manners by long courses of preliminary education, that has hitherto been thought a wholesome preparation at least, not to say absolute requisite for a physician, may not be dispensed with—and whether initiation into professional life may not be rendered less scholastic, and thereby more free and efficient? On this ground, I certainly fear, we are pursuing a specious notion at considerable hazard. No advocate am I for monkish exclusion, or prescriptive tyranny. I would ever be desirous that genius and talent should, if I may without levity employ the language of Sacred Writ, "have *free* course, run, and be glorified." I would place no barrier against the mounting up of unassisted power to the summit of honour and applause; but, at the same time, I would that a physician should still be a gentleman; that his education and training, even from childhood, should be such as

to insure a structure of mind and of manners calculated to meet the niceties, and, in many cases, the awful responsibility of his vocation; that literature, and science, and all the rich accompaniments of intellectual enlargement, should be his by professional right; that he should be guarded by every preservative against the temptations of time-serving meanness, or empirical trick; that he should feel the absolute necessity of recognizing something more in medicine than a mere knowledge of drugs and diseases; that he should be constantly compassed by moral sentiments; and, that he should be emancipated from that tendency to mere technicality by which men otherwise formed and moulded are more apt to be influenced. Even his own especial pursuit is, if I may so say, sublimed and purified by that sort of introduction to it, for the propriety of which I am now arguing. A physician well educated—(and by education, let it be understood, I do not mean the acquirement only of Greek, and Latin, and Mathematics)—the notion generally attached to education by those who decry its utility, and despise its pretensions, I say, a well-educated practitioner is much more likely than another to keep clear from such objectionable littleness, and cramping peculiarities, to which I have referred. *He* views things in their totality; *he* smiles at this individual busying and burying himself amidst the minutiae of mucous membranes—at that systematic who can trace no other origin of disordered being, but a deranged state of the chylopoietic organs—at this theorist considering the lobes of the liver as the lids of Pandora's box—at that looking into the brain as the source, and centre, and essence of all morbid disturbance. That there is somewhat of good, and of useful in all these hypotheses the philosophic physician is ready to allow; but *his* views and feelings are not thus bounded and trammelled. He separates, and combines, analyzes, and recomposes, till he produce an efficient essence from among these isolated principles; and so far from being under the guidance of authority, as some would insinuate, he, on the contrary, stretches his thoughts out from the *profane vulgarisms* of petty technicalities, and is, in point of fact, the most liberal and independent of all.

I have previously adverted to the comparative peculiarities of medicine in reference to prescriptive obedience. We do not, as do the members of the legal profession, search for precedent in order to establish law. We have no infallible appeal like the divine, for the enforcement of belief and practice, but that much more use than is generally imagined might be made of ancient authorities, is sufficiently evident to all those who have had the opportunity, and have embraced it, of making themselves acquainted with the writings of the ancients. And I would still contend for the adjunct of literature and philo-

sophy to medical knowledge upon the tenets already broached, even should the practical instructions of Hippocrates, the elegant delineations of Aretæus, or the terse and beautiful writings of Celsus, never, or but seldom be consulted.

But it is time to close these desultory strictures which have been put forth fearlessly, because they have been penned in good faith; and, I hope, with every deference to the judgment and opinion of highly respected individuals who may object to my sentiments, either in part or altogether. Such will, I am sure, further bear with me, while I quote the following sentences from a learned prelate, which, although immediately intended for students and members of another profession, are certainly not without application to my present purpose:—

“A too early commencement of a strictly professional education (says the Bishop of Lincoln, in a recently delivered charge), has for the most part a tendency to *cramp the mind*, to narrow its views, to dispose it to acquiesce without examination. The advantages derived from it are rather of a *mechanical* character; it places a set of tools in the student's hands, and renders him expert in the use of them, but *their application is confined within narrow limits*. Observe, on the contrary, the quickness and energy with which one whose education has been conducted on a more liberal plan applies himself to professional studies. He displays at once an aptitude to any pursuit, however foreign from his former occupations. Nothing comes amiss to him—he soon places himself on a level in extent of professional learning with these whose life has been directed to that single object; while in the application of his learning to practice, he possesses an incalculable advantage in the power which the habit of close and accurate reasoning confers, in seizing at once the important point of every question, and in the *copiousness of illustration which the stores of general knowledge supply.*”

NATURE AND TREATMENT

OF

CHOLERA.

NEW METHOD PROPOSED.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

IN a work of mine on “TEMPERATURE,” reviewed by you in 1830, many experiments are detailed, and suggestions offered, on the influence of an altered atmosphere, both on the lungs and surface of the body. The continued investigation of these subjects since that time, both in a philosophical and a me-

dical point of view, led me to examine the effects of the common air itself when varied in its density and pressure by art. The results of this inquiry appear so important as to induce me to submit the principle for the opinion of others before I could sufficiently ascertain its probable value myself. If the resources of philosophy can be made available in this instance to the purposes of life, much of that delay and expense may be avoided which the imperfection of our machinery obliged me to contend with in this country.

In the course of the experiments instituted on respiration, I observed that an animal confined in an air-tight vessel did not seem to suffer much inconvenience if a proper supply of air were afforded for breathing by a hood adapted to the mouth and nose, while at the same time the air in the vessel was exhausted or rarefied by a pump to the extent of two or three pounds on the square inch. After incredible labour and expense I succeeded in procuring a kind of bath, into which a young man was introduced with a hood attached, leaving an open space for the eyes, mouth, and nose, and luting the margin of the opening round the cheeks and forehead. The pump was then connected with the bath and the air exhausted until the mercury rose three inches in the glass tube, fitted as a gauge. As might be expected the skin became instantly hot, turgid, and red, and perspiration broke out profusely; he seemed very easy, rather exhilarated, and appeared to take in large inspirations of air; the chief sensation he felt was a drawing of the abdomen forwards, and the speedy heat of skin. Though above two tons weight were removed off this man, he remained twenty minutes, and came out very warm and wet with perspiration; the vessels of the skin were distended, and the surface red; his master, who was present, then entered the bath, and with similar results. Encouraged by the safety of these trials I attempted to form a horizontal case, or vessel of patent air-tight cloth on hoops, but owing to the want of a good artist, I could not well succeed in this attempt; others however may be more expert and successful.

As I find that half a pound abstracted off the square inch produces great determination to the skin and expansion of the chest, there is no necessity for strength in whatever vessel or chamber may ultimately be adopted, should the principle become applicable in practice.

The effects of a rare atmosphere are pointed out by those who have ascended very elevated situations, but in such cases the air inhaled was as light as that around the body. On the contrary it is natural to expect different results if you place a man in a rarefied atmosphere, but at the same time breathing an air of the usual density and pressure. Abstraction of a ton or half a ton of weight from the surface permits the cutaneous vessels easily to

fill, and favours their distention as it were by suction, while at the same time the lungs receive a column of the usual expansive force supporting the interior trunks and organs, pressing and propelling out the blood from the centre to the circumference.

In this consists the novelty and value (if any) of the principle I propose, and in this it differs from dry cupping of a part of the body, or one or more of the limbs.

So far as respiration is concerned, the trunk resembles an elastic vessel capable of expansion, and again of contraction by muscles and cartilages; and this contraction can take place even when the exterior pressure is taken off. If we, therefore, lift away two or three cwt. from the circumference of the thorax and abdomen, we facilitate pulmonary expansion to that extent by the easy descent of the diaphragm and elevation of the walls of the chest. We then fill this vacuum with an atmosphere capable of rendering the expansion complete, without deranging the economy of the circulation.

Whether useful or not the importance of contributing to the repletion of the lungs will probably double the ordinary volume of air, and more perfect oxygenization of the blood, must present to the philosopher an agent of great power indeed. Whether this new agent shall ever become available in *practice*, remains to be ascertained; but in *theory* it would seem capable of producing novel and important results, in determining revulsion from the interior to the exterior; in difficult respiration; inward congestions; apoplexy; suppressed eruptive diseases of the skin; sudden colds; incipient fevers, or other affections depending on obstruction of the pores of the exterior surface; in certain female complaints; cold stages of intermittents; in short, in all partial or irregular states of the circulation, the distribution of the blood to parts remote from those suffering from congestion promises to fulfil indications in a few minutes, which were slowly effected by the lancet or by exciting medicines, and often by the re-action of nature herself.

In many diseases of joints and internal inflammations, further depletions are unsafe from the danger of debility, though the interior inflammation requires more venæsection. Can this new agent solicit the vital fluid from the centre to the circumference, and save it from being drawn off at a vein, or wasted uselessly away?

In my work on "Heat," I have pointed out the sympathy and connexion between the external skin, the medium of almost all impressions, and its continuations lining the organs of respiration and digestion, and how relieving the one instantly affects the other. A convulsion of the skin turns in and lines the tubes of the lungs, presenting a surface twelve times more extended than that of the outer superficies of man. A further continuation of this cutaneous membrane lines the

alimentary passages throughout all their turnings and windings, and is redoubled over their folds to an incredible extent. All these parts sympathize so perfectly and suddenly, that when the exhalation on the surface is suppressed, a rapid revulsion is determined to some inward portion of this great continuous membrane.

In cholera, whatever cause it is
— “that poisons up

The nimble spirits in their arteries,” dissolves the connexion of our elements, empties the exterior exhalants, and distends those within. In this plague the state of the pallid, cold, and lifeless skin, the bloodless brancies and engorged trunks, the black and unoxylated blood, the constricted respiration, the compressed abdominal parietes, the suffused nervous pulp and membranes, would all seem to demand some power, such as that now proposed, to restore the equilibrium of the circulation, without over-stimulation; to draw out the blood, not to drive it; to fill the bloodless branches, and in proportion empty the over-loaded trunks; to generate heat from within, not to communicate it from without; to determine from the over-charged inner organs to the empty and wrinkled skin; to impart oxygen to the blood by larger volumes of air; and, consequently, to save the brain from the fatal effects of unoxylated blood, are some of the effects which I fondly anticipated from the resources now submitted.

Whether any of the symptoms of cholera can be mitigated or retarded by this artificial process remains yet to be ascertained. Besides the almost mechanical results expected from removing 20 or 30 cwt. off the exterior, there are chemical and electrical considerations which may deserve attention. I observed that the air pumped off from the body whitens lime-water much faster than is effected by common air, and therefore where the blood is black, drawing off carbonic acid gas from the skin may yield beneficial consequences.

Further; independent of the abstraction of blood from the spinal column and ganglionic nerves, it appears to me that the new process may alter their electrical condition, both by insulating the body and also by keeping it some time remounded in a rarefied and drier atmosphere, and consequently modifying the electrical influence of the air, on their nervous system*.

* The mystical nature of the origin of cholera, and the total failure of preventive measures, justify a person in venturing suggestions and hypotheses which might otherwise be deemed extravagant. Probably the following may appear of this class:—

The globe in which we move is the source and reservoir of the electric fluid.

This fluid is composed of two elements, the resinous and vitreous combined in due proportions.

The air around us contains inexhaustible stores of electricity. If the earth's electricity be altered in any part of the globe, owing to occult causes, such as central convulsions, polarity, magnetism, intense and long-continued heat, or other means, and the electric fluid be disturbed or rendered unequal, either in its due quantity or in the proportion of the two fluids of which it is constituted, then all electric bodies in contact with the earth will communicate part of their electrical properties to it, as a warmer body would to a colder, until their temperature should be equal. The repulsion or attraction of these electric elements will therefore take place between the air and the earth so long as either of the electric elements is in excess, or so long as one portion of the globe contains more or less of the electric fluid itself than is held in the air over that space.

The passage of electricity between the air and earth must produce effects on man, proportioned to the intensity of the discharge of the fluid of which he is the conductor, and to the state of his nerves at the time of the hidden transition of the minute shocks. A man is more an artificial being than animals left to nature, he suffers more; damp clothing, filth, and irregular living, contribute to make him the ready medium of passing the electric element between the air and earth, and also predispose his frame to suffer more severely from the transit of the fluid through him, and from the derangement of his own electricity.

The nerves are the conductors of electricity through man, as the bell-wires are through the rooms of a house; and the same influence in a minor degree which melts the metallic conductors in the apartments, disorganizes and alters the texture or condition of the nerves in the human body, already disposed to easy derangement. This lesion of the nervous tissues unfits the other organs for performing their functions, permits the equilibrium of the circulation to be lost, and the blood to run from the weaker and more minute branches to the larger trunks, hinders the evolution of animal heat, allows the blood to part with its watery constituent, which filters through the more relaxed membranes of the intestines, and probably disposes to the derangement of the very element which compose the body. In this injured state of the ganglionic nerves, spasms come on and apathy, deep debility, and all the train of symptoms which nervous people often feel when the clouds are unequally charged with electric fluid, and their equilibrium is about to be established by the phenomena of thunder.

If this analogy hold true, that in India a part of the globe lost its balance of the electric fluid; that this condition of the earth continued to advance at about the rate of a furlong per hour, or ninety miles per month; that the adjoining air and earth endeavoured to effect an equilibrium of their electricity; that in

doing so the susceptible nerves of a man were made the media of communication, then we could in some degree account for the march of this dire disorder—cholera, and for many of the appearances of its progress till death, and of the body after it—appearances similar in many respects to those resulting from the more sudden and fatal transit of the fluid through man in a storm of thunder.

We could also explain how the better conditioned persons escape, and the others suffer—how damp air and fogs, possessing such good conducting powers, bring so many people at one time and place under the influence of the passing electricity—how the disease diminishes in frequency and fatality, as the equilibrium between the air and earth, and the electricity in man himself become established, and the situation as if saturated or neutralized.

Many other phenomena resulting from the interchange of the electric fluid itself, or of its elements, present themselves; and in fact, the supposed contagion of the disease may be owing to the distribution of the electric fluid between a healthy individual in whom it is equal, and a diseased person in whom it is irregular, thus deranging it in the one that is well.

But speculations may amuse without aiming at useful results; might not therefore the use of some good non-conductor be recommended to be worn between the soles of the shoes on which we stand, and under the sheets on which we sleep; resined or wax cloth on the one hand, and powdered glass on the other, occur as hints probably worthy of being mentioned.

At all events the use of large quantities of fresh lime placed in baskets in every part of the house, and all other means of abstracting water from the air, must greatly diminish the conducting power so largely possessed by damp air.

The present proposal may become valuable, if it afford us a power capable of giving expansion to the exterior capillaries, and drawing out the internal *plenum* towards the external *vacuum* of the vessels.

This would restore the balance of the circulation, and afford to the sentient extremities of the nerves their pabulum and support necessary to their tone and healthy functions; for an exhausted blood-vessel will produce a contracted nerve. Violent convulsions and spasms often follow copious venesection and other evacuations. It is probably by this support and distension that Doctor O'Shaughnessy's transfusion was baneful.

As the merits or demerits of this proposal will all present themselves to the physiologist, I need not enlarge further, but conclude by offering the following cases of cholera, drawn up by Mr. Hart, the indefatigable superintendent of the Townsend-street Cholera Hospital in Dublin.

It is needless to observe, that no hope of

ultimate recovery was entertained in either case, and that the mechanism of the bath was so imperfect as to prevent my giving a drawing or plan of it, because any good artist could soon furnish one much more simple and efficacious. Here I may observe, that it will probably be found that steam may be proved the most convenient exhauster, for every inch of steam condensed will produce a vacuum of air in the bath to the same extent. This can be effected either in the bath or by a small vessel attached by a stop cock.

Some ingenious person may also contrive a small wire frame to cover a person in bed, and draw over it a covering of air-tight cloth, furnished with an oil leather hood for the head, or else a collar, adapted air-tight, round the top of the sternum, clavicles, and back of the neck. Here the exhaustion of air might take place to a sufficient extent under the bed clothes. The exhaustion should be gradual, and if carried further than the elevation of one or two inches of mercury, a common bandage might be loosely folded round the abdomen. Where the cause of cholera affects the principle of life, it is almost hopeless to expect a cure; but when the lesion is not so destructive, some of the effects may be alleviated, and prevented from becoming new sources of progressive derangement in the rapid circle of causes and effects, mutually reproducing each other in this alarming malady.

J. MURRAY, M. D.

Hon. Graduate T. C. D.

Merrion Square, Dublin,
July 4, 1832.

[When this sheet was on the press we were favoured with the reports of three cases of cholera in which the above plan was tried; these will be found in our second sheet, p. 768.—Eds.]

ROYAL COLLEGE OF SURGEONS.

LECTURES

ON THE

PHYSIOLOGY OF THE BRAIN AND NERVOUS SYSTEM,

BY SIR CHARLES BELL, F.R.S. &c.

PROFESSOR TO THE ROYAL COLLEGE OF
SURGEONS;

MR. PRESIDENT,

BEFORE I proceed to the consideration of the subject to which I purpose drawing your attention in this lecture, perhaps it would be as well were I to recapitulate a little of my last.

The old method of proceeding with the demonstration of the nerves; was founded too much on the consideration that the brain is the centre and origin of all the nerves of the body. We began to count from the brain, beginning with the first pair of nerves; we proceeded from the first to the second—thence to the examination of the third—all differing in their anatomy, and their properties; yet thus we approached the subject. You may recollect the custom of breaking up the orbital plate, and of examining altogether the various nerves in the orbit. We next proceeded with the fifth pair—contrasting it with the seventh. Then, followed the utter confusion of the nerves of the tongue and side of the neck. This method of proceeding was far from enabling us to draw out the thread of entanglement. It is better to change the aspect altogether, and not to begin from the brain, considering it as the universal source of energy, how natural soever this opinion may appear. We must acknowledge that the opinion which regards the brain as the centre and source of nervous power, is quite consistent with a superficial knowledge of anatomy. When you see nerves proceeding from the brain, some with ganglia, and some without, is it not natural to ask what is the reason of this arrangement? But the above method of proceeding with the dissection of the nerves, never could throw any light on the subject. Comparative anatomy offers great facilities for such study, but it is always better to begin with the simpler forms, and so proceed to the examination of the more complex ones. For this reason I drew your attention to the most inferior animals, such as possess sensibility and motion, without any nerves that can be demonstrated. Do the sensibility and power of motion in these animals exist without any nervous material—are they produced in some other totally different way? or do they owe their existence to a different disposition of the same mate-

rial which produces these effects in the more perfect animals? I think it most probable that these creatures possess a *diffused* nervous material, and that it is only when there is required a combination of active parts—when motion is to be placed under the direction of the will, that *nerves* are needed. The arrangement of the nerves is always in accordance with the parts which need them, it is therefore only in symmetrical animals that the nervous system is regular. We came then to the question whether the medullary line observed in the molluscæ, &c. is analogous with the sympathetic system of the mammalia. Bichat and others maintained that notion, and no wonder, that under the influence of his name we should use the same term in speaking of these nerves, and talk of the ganglionic system in both classes of animals; but while we use such a term, we are conscious there must be something wrong, because this medullary line in the inferior animals is the source of sensibility; and, as I before observed, Bichat himself acknowledged that the sympathetic system of the mammalia possessed no sensibility. Most certainly this nervous chain in the molluscæ is not analogous to the sympathetic of the mammalia—they are different as regards their anatomy—they are totally distinct in their functions. How are we to disentangle ourselves? Let us examine the spinal marrow of the mammalia. You have a regular succession of ganglia down the whole of the body, and nerves proceeding from these ganglia; these nerves corresponding in anatomical characters with those of the lower animals—they bestow sensibility, and order motion. We must admit, then, a correspondence here.

What is the spinal marrow? I cannot admit it to be a nerve—its structure is unlike that of a nerve. It is true its medullary substance is somewhat striated in appearance; but on cutting into it, we find cineritious matter in its centre. I consider that the presence of cineritious matter in

the brain, or in ganglia, denotes a new centre of energy. The spinal marrow then is rather a prolonged brain, itself a source of nervous energy. Observe, I speak from the appearance of its anatomical structure.

The roots of the spinal nerves have ganglia. Monro discovered that these ganglia do not belong to the entire spinal nerve. He observed that each nerve has two origins, one proceeding from the anterior part of the spinal marrow, and the other from the posterior; and that it was on the latter root only that the ganglion was situated. This was an important fact ascertained, viz. that the ganglion did not belong to the whole nerve. Observing that, the next thing remarked was that the spinal marrow had two roots, an anterior and a posterior one, and that these roots proceeded from different parts of the brain. The next thing, it was observed that all the nerves of the spine were alike—*all* having double origins—*all* having ganglia on their posterior roots. Is it not possible that with this beginning we may find a key to the confusion in which we first found the nerves. What is the reason of this regularity and symmetry in them? Every one has a double function, and is all sufficient for the performance of those functions. It would be curious to ascertain that these roots have different properties; then we should clearly see the reason of such an arrangement. But the spinal marrow is so matted together that such an inquiry is almost hopeless; this is no objection, for the double roots are perfectly distinct. With these ideas I resolved to proceed to experiment. I first put setons in the corresponding parts in the brain; but the result not being satisfactory, I next cut across the posterior root of the spinal marrow. I saw I was right, but in breaking up the bone the parts were too much disturbed to render the experiment sufficiently satisfactory; I then separated the roots, and cut some of them across. I was now perfectly satisfied; there was a

wide difference in the effect. On running a needle through the anterior root there was a corresponding *motion* in the animal, but no such result followed when I wounded the posterior root. These facts settling the difference in function, corresponded with the difference in the anatomy. The confirmation of these opinions by others came tardily, but now they are universally received.

Now, Gentlemen, suppose we find nerves coming off from the anterior column of the spinal marrow, and suppose we have proved them to be appropriated for motion (as yet we can only *infer* that the other column is for sensation), cannot we follow up this anterior column into the brain, and observe what cerebral nerves are connected with its continuation, and what are their functions! Accordingly we find it form the corpus pyramidale from which a nerve is given off. This nerve ought to be a muscular nerve; it is the ninth, or motor linguæ; this is a peculiar nerve, it has not a double root, it has no ganglia; it ought to have no sensation. Proceeding further we find another nerve; this too ought to be for motion; it is the sixth; the abducens destined for the abductor muscle of the eye. Lastly, we find the third, or motor oculi. Thus we have some explanation respecting these nerves.

Next regarding a ganglion. I have stated, that as we have proved the anterior column to be the origin of the motor nerves, we may infer that the posterior roots are those which render the entire nerve a nerve of sensation. But here I was met with the opinion, that the office of a ganglion is to cut off sensibility. I always thought this idea rather an extraordinary one. If nature wished to cut off sensibility, would not she rather cut off the nerve than furnish it with a hard knot? But still we require demonstration. In examining the nerves from the first onward, is there a nerve with a ganglion? We fix on the fifth nerve; it has a ganglion, the Gasserian ganglion. Does this resemble the ganglia of the

spinal marrow, or those of the sympathetic? It bears the greatest resemblance to those of the former. The fifth nerve has a double root too. Here again there is a resemblance; and these roots do not unite till they have passed the ganglion, for accurate dissection and observation have demonstrated that the smaller root enters the complete nerve after the other root has formed the ganglion. Still experiment was necessary in order to prove that the ganglia, so far from cutting off sensibility, were in reality the characteristics of nerves of sensation. I divided the infra-orbital division of the superior maxillary branch of the fifth, where it emerges from its foramen to ramify upon the face. No apparent change took place; the face was still equal to all its motions; but on pricking the part the animal felt nothing. This was sufficient to prove that ganglia do not cut off sensibility, as this nerve, furnished with a ganglion, is evidently a nerve of sensation. We have now, therefore, sufficiently established the fact, that the anterior column of the spinal marrow is for motion, and the posterior for sensation.

Now came the most agreeable part of the affair, I mean contributions from learned friends, corroborative of the opinions I had formed. The first was respecting the case of a person who had lost sensibility on the left side, and motion on the right. This person was a mother; she could hold her child by means of her left hand, and while she *looked upon it* she nursed it carefully, but the moment her attention was drawn from it, the hand relaxed, and the child was in danger of falling. There was here no controlling sensibility. It was noticed likewise, that she had no sensation of sucking when the infant was applied to the left breast. This is a remarkable instance of one property being withdrawn from a nerve, and the other retained. It affords us an example likewise of muscularity without governance; there was no sensi-

bility to inform her of the necessity of keeping her arm in the proper attitude, her only information was afforded by the eye, and it was only when she looked upon her child that she possessed complete governance over the muscles of that arm. Another case was sent me, and was that of a person who had lost the sensibility of one hand, but still retained the power of moving it. The most singular effect of this was that he could not find any thing in his pockets. So far we may readily conceive how one property may be lost, and the other retained. I was informed of a lady who had partially lost the sensibility of her hand, and it was remarkable that, in her case, whenever she touched any thing, the impression conveyed to her mind was that sand intervened between her fingers and the substance she tried to feel. I think that this depended on an affection of the nerve in its course, rather than of its origin in the brain.

Following this course we discover, that the fifth is in fact a spinal nerve; it has a double origin, and on one of these origins there is a ganglion. We have proved that the fifth nerve supplies the face with sensibility, and when we inquire, we find that branches of the seventh pair, as well as of the fifth, ramify upon the face. We shall here see the necessity of taking facts with us. On dividing the portio dura of the seventh you take away motion; hence it has been said that this nerve supplied the face with voluntary motion; and certainly we should come to this conclusion, if we examined without forethought. Now if we consider the subject with due attention, we shall see we must have another nerve for the face; there is something wanting, if the seventh is merely a nerve of voluntary motion. The error has in a great measure arisen from the anatomy not having been duly studied. Why does the portio dura go off differently from the fifth? there must be another office for it, for the fifth being a spinal, a double nerve will

do for voluntary motion. The face is connected with respiration; and, on looking again, we find the origin of the seventh to resemble those of the respiratory nerves. Every one has been dividing the fifth and the seventh; but they did it without previous study, and therefore without result. Something more than mere experiment is necessary in the investigation of these matters—we must first study the anatomy, and think and reason on the subject.

You will not refuse on this view to go back to the spinal marrow. We have as yet only shewn that it gives off nerves, each having a double origin, and that these nerves in accordance with their double origins have double functions, and are nerves of sensation and voluntary motion. There is an act of respiration. Is this process carried on by volition? A respected friend of mine has stated that it is; and when it was urged to him in reply, that respiration was carried on during sleep, he answered, “and do we not turn in our sleep?” But, gentlemen, respiration goes on in apoplexy, and when death is close at hand, when the individual is completely insensible to all internal and external impressions; we cannot then conclude that it is a voluntary act. We must inquire therefore, now, what is the source of the motion producing respiration. Is there a source of motion for respiration different from that of volition? We crush the lower part of the spine, respiration is still entire; we destroy it higher still, as far as the lower part of the neck, as high as the fifth vertebra, and still respiration goes on; there shall be disease in the brain, causing pressure upon it, and suspending all other faculties, the cerebrum and cerebellum shall be completely disorganized or removed, and still respiration will go on.

We have now a very narrow space left for further investigation: there is still the medulla oblongata and a small portion of the spinal marrow; and we find that if this part be crushed or

removed, the animal instantly ceases to breathe. If the human fœtus is born without a spinal marrow, it never breathes; but acephalous monsters, such as have no brain, may breathe, and may live for a short time. If they do live, we find the spinal marrow continued up to the medulla oblongata, and at the top of it a knob. On examining the upper part of this portion we observe that no nerves are given off, from either the anterior or posterior columns or roots of the spinal marrow; but there is a column between them from which some nerves are given off, and these are, low down, the *spinal accessory*, higher up, the *par vagum* and *glosso-pharyngeal*, and higher still the *portio dura of the seventh nerve*. In fact, from this concentrated portion nerves are supplied to all parts concerned in inspiration and expiration.

We are now looking to the most complex function of all. The office of respiration is not merely to draw in and expel air for the chemical changes to be effected in the blood. The actions of coughing, sneezing, and vomiting, are connected with and depend on this important function, and are all provided for by being supplied with nerves of respiration. And when we look to the human species, we cannot refuse to acknowledge that the full perfection of this system therein exhibited, proves respiration to be the highest function of all; for the parts concerned in respiration are now subservient to speech, and the varied expression of the passions of the mind: these latter are certainly the highest operation of all, as they directly administer to the human faculties.

A friend, to whom I was demonstrating these facts, said pettishly, “but what has respiration to do with the face?” His mind was warped by the confined ideas he had of this function; he regarded it only as a chemical process; he did not consider how important, how essential it is for speaking, &c.: he did not look on the mouth and lips and eyes as connected with

the function of respiration. I could undertake to prove (pardon the boldness of the expression) that suffocation would inevitably result without these relations, and that the immediate effect of coughing, sneezing, or vomiting, would be destruction of the eye. To guard against such an effect, one of these nerves is sent to the eye-lids, otherwise on any violent effort of respiration these parts would become suffused and congested to a dangerous degree.

Reviews.

The Edinburgh Medical and Surgical Journal. July.

THE present Number of our justly respected contemporary contains the usual proportion of valuable communications, embracing some practical points of considerable interest. The original papers are eleven in number, and these we proceed to notice briefly.

ART. I.—*Remarks on Umbilical Hæmorrhage.* By THOMAS RADFORD, Esq. Senior Surgeon to the Manchester Lying-in-Hospital.

Mr. Radford describes hæmorrhage arising from the ordinary method of securing the funis, and that which occurs after that portion left attached to the fœtus, has fallen off. He objects to the usual plan of applying two ligatures, and then dividing the funis between them. His proposition is somewhat different, but we do not perceive its superiority over the method generally employed. He says, "let the ligature be first tightly placed upon the placental portion of the cord, and then let another ligature be loosely placed upon that portion of the funis which is to remain connected with the fœtus, and which must be tightened after the division; and in order to give additional security, let a second ligature be placed upon this part. The advantage of this method arises from the more decided influence which the ligature

produces upon the calibre of the vessels, in consequence of the more serous portion of the gelatinous fluid escaping from the divided extremity." We do not comprehend the superior advantages of this plan of operating over the ordinary one, unless it be the application of the second ligature on the first. We should reverse the order in which the two ligatures are advised in the first part of the above extract; for example, if the funis be drawn between the finger and thumb, so as to press the gelatinous matter towards the placenta, then the ligature will be applied on the fœtal portion of the cord with the greatest certainty of success. In some cases so many as seven ligatures were put on, without the effect of preventing the death of the fœtus by hæmorrhage. This result will also follow, as is well observed by Mr. R., when the funis is ossified, or cartilaginous. He details two, and alludes to many, fatal cases of bleeding from the navel. He states, from examination of infants after death, that the extremity of the umbilical vein is not obliterated at the time of the separation of the funis. Its extremity alone is obliterated by adhesive inflammation, the remaining portion of the vessel being filled with coagulated blood, which is gradually absorbed. The removal of this coagulum commences at its umbilical extremity, at which place it is first converted into ligament. Escharotics, the actual cautery, the hare-lip pin, have been employed, but all have failed in consequence of the ulcerated and sloughy state of the orifice, which is unfavourable to obliteration by adhesive inflammation. Under these circumstances he proposes to make an incision along the umbilical vein in a direction upwards from the umbilicus, taking great care not to wound or include the peritoneum in the ligature. The operation is advised in such cases of hæmorrhage only as defy all other remedies. Mr. Pout proposed tying the umbilical arteries, in the twelfth volume of the *Medico-*

Chirurgical Transactions. Mr. Radford concludes his instructive paper by pointing out the distinctive marks between venous and arterial hæmorrhage. When we consider the fatality of the disease under notice, we must admire the proposal made in this essay.

ART. II.—*Cases of Cholera Asphyxia.*

By C. W. GRAHAM, M.D. &c.

Two cases are related, the first terminating fatally, the other favourably. The writer was a contagionist; but having observed that the wife and other members of the family of the man, whose case proved fatal, had slept in the same bed as the deceased, without any change of the clothes or fumigation, and were not affected with cholera, he at once abandoned his opinion. What will our respected friends at Whitehall say to this?

ART. III.—*Cases of Insanity, with the Necroscopic Appearances, &c.* By J. MACROBIN, M.D., Medical Superintendent of the Lunatic Asylum, Aberdeen.

Several cases are detailed, in which the arachnoid membrane and pia mater were found inflamed; but there were many other examples in which no such appearances were observed. The one class of cases requiring antiphlogistic measures; the other injured by them.

ART. IV.—*Case of Extirpation of a Tumour, with Ligature of the Common Carotid.* By ALEXANDER EWING, M.D., Lecturer on Surgery in the Aberdeen University, &c.

The tumour was $15\frac{1}{2}$ inches in its length, and $20\frac{1}{2}$ in circumference at its most depending part. It was of many years standing. The carotid was first tied, and after the tumour was removed, it was necessary to tie several large arteries near the angle of the jaw, as they bled freely. There was no more than a pint of blood lost. He bore the operation well,

but died on the fourth day after its performance.

ART. V.—*Account of a Case of Chronic Hydrancephalus, with the Appearances on Dissection, and Observations on Obliteration of the Sinuses in these Circumstances.* By DAVID CRAIGIE, M.D.

This is a very instructive case, as it presented features very different from those observed in chronic hydrancephalus. The body was well developed, the infant appeared healthy, though the head was very much enlarged. The head was rather smaller in proportion at birth, but a small tumour was observed in the anterior fontanelle about the first month, and the general health and development were good. At the second month the head measured $20\frac{1}{2}$ inches in circumference, and 12 inches from ear to ear. The head increased an inch in circumference every month, and the functions continued unimpaired; even at six months he could use his limbs as vigorously as a healthy infant. He died at the tenth month, the ordinary symptoms of hydrancephalus having preceded the event.

After a most minute and graphic description of the necrotomic appearances, Dr. C. concludes that in chronic hydrancephalus the fluid is deposited in the ventricles, and not between the membranes of the brain, as is generally imagined. He refers to Tiedemann's account of the development of the foetal brain, and agrees with him that if serum is deposited before or at the fifth month, it may pass to the exterior surface; and this will also happen when the effusion is excessive, and the hemispheres of the brain are attenuated to an extreme degree. Dr. Craigie is inclined to think that when the brain is very thin, persons may readily cut into the organ and mistake it for the membranes. We cannot help thinking that this is extremely improbable, and at all events is no proof against the opinion that the serum may be effused between the membranes of the brain. Dr. C.

denies that the sutures are separated in chronic hydrocephalus; he maintains that the sutures are not formed, as the natural process of ossification is checked by the disease.

The learned author of the paper makes many valuable observations, and cites several cases of the disease described by him, which occurred at all ages up to the twenty-fifth year. This accumulation of facts must have cost its author great and laborious research. He mentions one case in which the skull was much enlarged, and contained 200 pieces of bone, which shews that the ossific process had commenced in different points. This paper is upon the whole a valuable contribution to pathology, and adds much to the well earned reputation of its author. It is appropriately succeeded by a similar case, in which repeated puncture of the brain with a trocar, and the use of appropriate remedies, effected a cure. The history of this case is Art. VI. It is given by Mr. Russell of Aberdeen. The facts are these:—A female infant, aged eight months, laboured under chronic dropsy of the brain. The circumference of the head was 23 inches, the transverse diameter from one ear to the other was $18\frac{1}{2}$ inches. The puncture was made with a fine trocar, such as that used in hydrocele, about half an inch in depth, on the right side of the anterior fontanelle, and three ounces of serous fluid were discharged through the canula. A piece of adhesive plaster was placed over the puncture, and a roller round the head. She slept well that night, was a little feverish for two days, and then appeared as well as before the operation. On the tenth day after the operation a similar puncture was made in the same manner on the opposite side, and $5\frac{1}{2}$ ounces of turbid serum, containing flakes of lymph, were evacuated. No unfavourable symptom followed. In five days afterwards the size of the head was diminished $2\frac{1}{2}$ inches in circumference, and $2\frac{1}{4}$ inches across the vertex. Ossification had made considerable pro-

gress. A large opening in the frontal bone, extending from the bregma to the nose, was completely filled up, while those in other parts were much diminished. In a fortnight after the operation it was repeated near the first position; the trocar was pushed to the meninges, but only half an ounce of fluid escaped; it was therefore re-introduced obliquely into the ventricle, and upon withdrawing it, nine ounces of serum were discharged in a continued stream. The wound was closed and a roller applied round the head; the pulse became weak and feeble; she became faint, but during the evening she fell asleep, and awoke an hour afterwards, apparently much refreshed. No unfavourable symptom followed. The pulse became more regular, the startings during sleep were less; she appeared in every respect better, except that the alvine dejections were of a dark green colour. The hydrocephalic symptoms returned in a slight degree; fluctuation was evident at the bregma. She was now salivated with calomel, absorption took place, and she speedily recovered. The first operation was performed in September last, and on the 4th February she was described as a stout lusty child, and her size uncommonly large for her age. The bones of the head are now complete, except the anterior opening, which is closing. The size of the head is less by four inches in circumference, and $2\frac{1}{2}$ across the vertex, than it was previously to the first operation. With the exception of Dr. Conquest's two cases, in which the ventricle was punctured, Mr. Russell is acquainted with no other, and he thinks that the operation is not a very dangerous or doubtful one, and that under favourable circumstances the chance of cure is such as to justify its performance.

ART. VII.—*Three Medico-legal Cases of Homicide, in which Insanity was pleaded in exculpation.* By ALEXANDER WATSON, Esq. F.R.C.S.E.

The charge of murder was clearly proved in each of these cases; but

the moral responsibility of the individuals was involved in doubt and difficulty. The insanity of the first prisoner was manifest, he was acquitted of the murder and ordered to be confined for life. He was much attached to his unoffending son whose life he had destroyed; he was insensible of his crime and freely confessed it.

The facts of the second case clearly established the crimes of murder and robbery, and there was no proof whatever of insanity. The culprit was of weak intellect and dissolute habits, and after he had murdered his aunt with an axe, he plundered her house, and sold the plate he had taken to a publican who was formerly a jeweller. The only proof of insanity offered was his confession of his crimes to a magistrate, which might have been suggested to him by his legal adviser as evidence of mental derangement. He was reprieved during his Majesty's pleasure. He should have been executed.

Mr. Watson clearly shews by his comments upon the evidence in the third case, that there was no evidence of insanity. He and Dr. Spens saw no signs of insanity in their interviews with the accused, and "no part of his conduct, either before or after the murder, afforded any evidence of alienation or unsoundness of mind. But Drs. Mackintosh, Scott, and Alison, conceived from his previous history (which betrayed many acts of eccentricity), that although his conduct shewed no insanity at the time of the murder or afterwards, it was *probable* he had laboured under some hallucination or mental delusion when he committed the deed. Is it enough to exculpate a murderer, who committed the crime in the apparent possession of reason, that at a previous period he evinced some slight indications of insanity—had some eccentricities of conduct—and had some peculiarities in his religious belief and observances? The admission of such a principle would certainly be neither conformable to the principle of law,

or of medicine, or of common sense." We fully agree with this conclusion, and must express our surprise that the contrary opinion could be entertained by physicians of such eminence as Drs. Alison and Mackintosh. Again, we cannot assent to the presumption that there was *probably* some mental hallucination at the time of the murder. There was no proof of this, and no court could allow such evidence to screen the prisoner. "Accordingly," says Mr. Watson, "it was the unanimous opinions of the judges and jury, that Howison's insanity at the time of the murder was not established, so he was condemned to execution." He concealed his crime to the last.

(To be continued.)

The Dublin Journal of Medical and Chemical Science for July, 1832.

Hodges and Smith, Dublin. Plate.

THE original department in this Number commences with an article by Dr. ROBERT J. GRAVES, "*On Double and Single Vision*." In this paper the Doctor examines the opinions advanced by several authors, namely, Dr. Arnott, Dr. Brewster, Dr. Mayo, Professor Lloyd, Mr. Herschel, &c. He does not incline to the doctrine of the last-mentioned gentleman, that single vision depends on habit, and brings forward many objections against it. He thus sums up his conclusions:

"From what has been stated, it appears that no object is seen single except both eyes be directed to it; in other words, except it be placed at the intersection of the optic axes. When an object is so placed, it seems to the right eye to be exactly in the same place as to the left eye, and consequently its two images perfectly coincide and appear but one. If the object be moved out of this position, its two images no longer overlap each other; and if it be very small and bright, it will very soon appear double. From this it follows, that in truth we only enjoy single vision in

its perfection with both eyes with respect to one object at a time, and that all the remaining objects within the field of view common to both eyes are seen with their images not perfectly coincident, but more or less overlapping each other, or else completely separate, and consequently such objects appear, if I may use such an expression, more or less, or completely, double. To most persons this assertion will appear paradoxical; they will consider it impossible that so curious a circumstance should have escaped their notice; nay, they will at first disbelieve it altogether, as contradictory to their previous experience; but, nevertheless, the fact is so, and we only fail to perceive it because *no object but the one is ever seen distinctly by the eyes at one time*. Thus, when we look at a printed page, we only see one letter distinctly; the letters on each side of it are seen, but much less distinctly, and those at a considerable distance excite no accurate perception of their shapes whatsoever. The amazing rapidity with which the motions of the eyes are performed, it is true, prevents us from feeling any practical inconvenience from this indistinctness of objects seen obliquely, and the attention we always for the moment bestow upon the object directly before our eyes, prevents us from perceiving the comparative indistinctness of all other objects within the field of view. It is obvious also, that objects near the intersection of the axes are not seen double, for their images, although not coincident, still very nearly overlap each other. To be seen truly double, therefore, an object must be removed to a certain distance from this intersection, and in proportion to this distance, it is less and less attended to; and consequently the circumstance of its appearing double is entirely overlooked, unless our attention be forcibly drawn to the fact."

We have thus allowed the Doctor to tell his own tale in his own words, and, we must say, that although his opinion appeared, and still appears,

rather startling to us, judging from the facts daily before our eyes, yet he supports his opinion very ably. Could we remove the object from the intersection of the axes, and yet keep up our attention to that object, probably, nay, even possibly, Dr. Graves' theory might be verified; but we are inclined to believe that the very circumstance of directing attention to the object would bring it within the intersection, and consequently the intentions of the experimentalist would be defeated.

The next essay is from the pen of the scientific editor, ROBERT J. KANE, Esq. entitled, "*Remarks on some Properties of the Hydracids*." It is one of great interest to the operative chemist, but not of so much value to the medical practitioner, treating as it does of the salifiable and electric properties of the hydracids.

Next follows—" *Observations upon the Management of the Placenta in Natural Labour*," by HENRY MAUNSELL, M.D. The Doctor recommends that the uterus should never be allowed to relax, after the expulsion of the child, the observance of which has, he says, been so successful that he scarcely ever meets with a retained placenta, and very rarely indeed a case requiring the introduction of the hand into the uterus. His teacher, Dr. Johnson, first recommended this plan to him. He says—

"For this purpose, the moment the perinæum is out of danger by the passage of the head and shoulders through the vulva, the left hand of the accoucheur is to be placed on the abdomen of the patient, and with moderate but firm pressure, the uterus to be followed down into the pelvis as it contracts upon and expels the body and limbs of the child. This being accomplished 'to the very toes,' the womb will be felt hard and firmly contracted; and that no interval may be allowed for relaxation, the practitioner, before he proceeds to separate the funis, is to cause the nurse to pass her hand over his, that immediately upon his withdrawing it

she may keep up similar and as effective support. By this prompt and continued employment of pressure, it is obvious that several advantages will be attained. The syncope, from mere vacuity of the uterus, which has been known to take place to a very alarming, if not fatal, extent, will be most probably prevented. The tendency also to secondary relaxation, which sometimes exists, will be obviated, and the uterus kept closed upon its contents, while at the same time the benefits of friction in the excitement of contraction will be fully procured."

He then proceeds to make some remarks on the use of the binder, which he considers of great advantage, and censures its neglect. "The mode of its application requires a few remarks. In the first place, the nurse should never be suffered to withdraw her hand from above the uterus until we are ready to tighten the binder; and secondly, in pinning it, we should always commence at the lower edge, and be careful that this be placed below the trochanters. The greatest fault in the binders commonly used is their narrowness; they should be broad enough to reach from the ribs to below the trochanters. By these precautions we prevent the binder from slackening by slipping upwards, as the tapering form of the hips would otherwise incline it to do. When the latter stages of labour have been conducted in the manner just described, the result, in a very great majority of instances, will be a speedy and safe separation of the placenta without any further interference whatsoever. Generally the whole process will be completed within 15 or 20 minutes. * * * * If in any case expulsion does not take place within half an hour, we will generally find that the binder has become slack, and by tightening it again, if necessary, placing a compress under it, and using moderate friction and pressure over the uterus, we will very often be able to excite contractions amply sufficient for our purpose."

The continuation of Dr. GRAVES' valuable "*Observations on the Treatment of various Diseases*" follows next, and is the most valuable in the whole Number; it is of course arranged under different heads, and the first is *tartar emetic in certain chronic diseases*. Persons of a weakly habit, or of a certain age, after acute disease, particularly *bronchitis*, are left in a very debilitated state, without fever and without appetite. The most constant symptom in this state is the appearance of the tongue, which is always moist, and has its whole upper surface covered with a remarkably thick, white, smooth, and tenacious paste. There is seldom any nausea, and the bowels are in good order, but the food taken appears to be always insipid, and the tongue and mouth clammy and uncomfortable. Purgatives, followed in due time by tonics, have been hitherto employed by physicians to remove this state of affairs, but Dr. Graves considers tonics injurious while the tongue has that peculiar coat on it. The following is his plan of treatment:—

"The patient is put on low diet, consisting of white bread and whey; milk is altogether interdicted, as it invariably appears to aggravate the symptoms. During the day the patient takes every hour a tablespoonful of a solution of tartar-emetic in twelve ounces of water; if it nauseates the stomach, the dose is to be diminished. This plan is persevered in for two days, and an emollient enema is administered in the evening, if necessary. On the third day the same plan is continued until dinner-time, when the patient gets meat and vegetables, and is encouraged to make as hearty a meal as possible. In an hour after this, an emetic, consisting of twenty grains of ipecacuanha, and one grain of tartar-emetic, is exhibited, and vomiting promoted by copious draughts of tepid water; during the two following days the low diet and minute doses of tartar emetic must be resumed, and

on the third day again the full dinner and emetic.

"During this course the tongue gradually becomes clean, the desire for food increases, and the general health and strength improve rapidly, when the patient is allowed a more nourishing diet, which however must be done with great caution and judgment."

The next division of the paper, "*On habitual Constipation*," is of such practical importance that we may probably extract it entire. Dr. GRAVES is of opinion that none of the following symptoms counter-indicate the exhibition of wine or opium, provided that other circumstances seem urgently to require it.

"1st. In the first place, as to the tongue, *at an advanced period* of fever, I have often derived the greatest advantage from wine and opium, although the tongue was dry, the colour of old mahogany, or else coated with a yellowish-brown dry fur, and protruded with difficulty, while the teeth and gums were covered with sordes. Wine or porter in moderate quantities seem *generally* to agree better with this tongue than opium; in some cases, however, the latter is indispensable.

"For fear of misleading the reader, I must again remark, I by no means wish to assert that such a tongue uniformly, or even frequently, indicates the use of these medicines: on the contrary, this state of tongue and mouth will often be observed at a time when leeches and the antiphlogistic treatment are required. Let it be clearly understood, however, that at an advanced period of fever, this state of tongue may exist, and yet wine and opium may be given boldly, provided, as I have said before, the general state of the patient seems to require it.

2ndly. The observations I have made concerning the tongue are applicable to *suffusion of the eyes*. The eyes may be heavy, a little red, very much suffused, and may have the singular expression of watchfulness com-

bined with great redness of the conjunctiva, which is termed a ferretty eye, and yet wine or opium may be the only remedies capable of saving the patient's life. It should always be borne in mind, that want of sleep tends to make the eye red.

"3dly. A hot and dry skin does not necessarily contra-indicate the exhibition of wine or opium, particularly where there is at the same time a tendency to coldness of the extremities.

"4thly. The presence or absence of delirium must always excite our attention when the question of giving wine or opium arises. I believe that these medicines are never applicable when the delirium is violent and continuous; but the patient may rave a great deal, particularly at night: he may mutter and speak to himself, he may point to various imaginary appearances, and may fancy himself surrounded by persons or things which have no real existence; he may be restless and irritable, constantly endeavouring to leave his bed for the purpose of walking about the room or sitting at the fire; and yet he may be in a state urgently demanding wine or opium. On a more accurate examination, we find that his delusions are not so strong as to leave no room for the exercise of his reason. When spoken to emphatically, he answers in some cases incoherently, but in others with perfect precision and presence of mind, and does not for some minutes relapse into his former wanderings. This state of mind is usually accompanied by an almost total want of sleep, and in many, by a great anxiety about their illness. To procure sleep, as has been well remarked by Dr. Latham, in a late number of the *Medical Gazette*, is here one great object, and this can only be done by means of wine and narcotics. In some, the mental aberration is scarcely perceptible, and they have all the characters of great excitement of the nervous system, without any actual raving or delirium. There is general tremor and subsultus,

The tongue is tremulous when protruded, or when moved in speaking, and consequently the articulation is uncertain and interrupted, while in general manner and mode of answering questions the patient strongly resembles a person affected with delirium tremens. This group of symptoms is likewise accompanied by want of sleep, and best treated with wine and opium.

"5thly. The appearance of the face has been much relied on by some, as capable of guiding us in forming our decision. Heat of head and face, redness of the cheeks, and strong pulsations of the carotids, are well known as contra-indicating wine or opium; but in the advanced stages of fever, the face, like the eye, may be suffused, it may be even occasionally flushed, and when flushed, it may be hot, and yet wine and opium may, nevertheless, be our only resource.

"6thly. Headach, when violent, is at any period of fever a decisive circumstance; sleep cannot be obtained while the pain is unmitigated, and we must therefore attempt to conquer it by the most active treatment, by local applications to the head, by depletion from the vascular system, and by purgatives. Sometimes, however, these means fail, and the physician feels that he cannot pursue this mode of treatment any further. Under such circumstances, a dose of opium boldly exhibited will occasionally succeed in procuring sleep, from which the patient awakes nearly free from headach. Before having recourse to this remedy, the effects of a blister to the nape of the neck ought to be tried. In the more advanced stages of fever, the headach, or rather the heaviness felt in the head, is something very different from the throbbing, acute headach, just spoken of, and constitutes no contra-indication to the use of wine and opium.

"7thly. The state of the pulse requires to be duly considered. Its frequency is not of much importance, for I have seen wine and opium prove highly serviceable in all its varieties,

from 70* to 130, or even upwards. No one would ever think of exhibiting these remedies when the pulse is strong, and more particularly when it is strong and hard; but the case is otherwise when it possesses only a certain degree of *hardness*, and is at the same time small and thrilling, not resisting compression with the force the sensation of its hardness leads us to expect."

The Doctor next gives us a ludicrous instance of the effects of the imagination, under the head of "*Milk Powders*." A primiparous lady, in consequence, as the Doctor considered, of her extreme anxiety to suckle her child, had almost complete failure of the lacteous secretion. The medical attendant not being able to make any hand of the case, the Doctor was called in, and suspected at once that her anxiety was the cause of the failure; in order, therefore, to withdraw her mind from the subject, he should defer her hopes to a future day, and accordingly gave her powders of calcined magnesia, with aromatic powder, which were labelled "*German Milk Powders*," assuring her, with a very grave face, that they would have the effect of bringing abundance of milk to her breasts at the expiration of two days. One powder was to be taken every third hour night and day, and the breasts not to be uncovered until the Doctor's next visit. "Before twenty hours the flow of milk was abundant, and in two days afterwards I had a visit from her accoucheur, who came to beg, as a special favour, my recipe for the *German Milk Powders*." Who will talk of the gullability of John Bull after this?

The Doctor next speaks of *melæna in fever*, and *gastrodynia*, which the length of this article forbids our noticing, as well as an interesting essay by the editor, "*On the Iodide*

* Last winter we had several examples in the Meath Hospital of the pulse being under 70, and regular, in a very bad type of fever, with parched tongue and raving.

of Platinum, and its saline combinations; and also Dr. HOUGHTON'S "Remarkable Case of Pneumothorax."

Having already spoken twice in high terms of this periodical, we need only add that it maintains its character fully, and justifies us in our opinion, that if the Irish practitioners would, they most assuredly could, support a Medical Journal with ability and credit.

THE

London Medical & Surgical Journal.

Saturday, July 14, 1832.

CHOLERA IN DUBLIN.

DR. MURRAY'S PLAN OF TREATMENT.

IN another page of our Journal will be found an account of a novel and scientific mode of practice by Dr. Murray, Physician to his Excellency the Chief Governor of Ireland, to be pursued in the treatment of cholera. It consists in removing the pressure of the atmosphere from the body during collapse. It is now in the course of being tried in the Cholera Hospital in Dublin, but though the cases in which it has been hitherto employed were utterly hopeless, yet the fatal termination was averted for some hours. It is impossible to form an opinion on the efficacy of this plan at present; but it is satisfactory to know that it produced no injurious effect. Whether it will succeed or not remains to be determined; but should it prove beneficial it will add a powerful remedy to our therapeutics. This ingenious proposal accords with the many original and valuable suggestions made by its author in his

instructive work "*On the Influence of Heat and Humidity, with Practical Observations on the Inhalation of Iodine and various Vapours in Consumption, Catarrh, Croup, Asthma, and various other Diseases.*" Lond. 1829.

We candidly acknowledge, however, from some personal experience in the treatment of the prevailing epidemic, that we do not expect Dr. Murray's plan to succeed alone, for it appears to us that unless the cerebro-spinal system can be excited, as well as the circulatory, when there is great collapse, success cannot be obtained. We cannot expect to rouse the circulation, when the functions of the cerebral and nervous systems are almost destroyed; the heart cannot act under such a condition, and it must be obviously absurd to suppose that either saline medicines passed into the system by injection into the veins or otherways, can change the constitution of the blood, or excite the centre of the circulation, when there is profound collapse. It is extremely probable that in the milder forms of cholera, the removal of atmospheric pressure, the saline plan, and the employment of electricity, might succeed; but there are cases in which the vitality is so low that all these measures have proved useless.

CHOLERA IN LONDON.

CHOLERA is extremely prevalent and fatal at present in London, we believe much more so than at any time during the year. It has, to our knowledge, destroyed a great number of

persons in the Borough, and has appeared on the other side of the river. Some fatal cases have occurred in Fetter-lane, Field-lane, and the City, during the week, and we have heard of three respectable persons who were destroyed by the disease. Our readers will not accuse us of being alarmists, our past conduct incontrovertibly disproves such an opinion. We make our statement for the good of humanity alone, and more especially as any declaration or proclamation from that despicable junta, the Central Board of Health, would be justly looked on with suspicion and distrust.*

The best preventives of cholera, are regularity of life, temperance, good living, avoiding vegetables and fruits, observing personal and domestic cleanliness, and tranquillity of mind. The disease seldom, if ever, attacks those who observe these rules, or whose health and spirits are good. It is preceded by diarrhœa in most instances, and can be prevented, if ordinary medicines are employed for the removal of the bowel complaint. There is no proof whatever of its being contagious.

CHOLERA IN FRANCE.

It appears by a recent French medical journal, that in the departments of the L'Oise and La Somme, an endemic disease, called the military sweating sickness (*la suette miliaire*)

is now prevalent, and complicated with many of the symptoms of cholera, which is generally fatal. Many persons recovering from the military disease are attacked with cholera, and very speedily fall victims to it. The symptoms of the endemic are modified by the prevailing epidemic disease.

SPEEDY AND EFFECTUAL CURE FOR RHEUMATISM.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,

I BEG leave to announce, through the medium of your highly valuable Journal, to the gentlemen of the medical profession, a mode by which rheumatism may be speedily and effectually cured. To many this announcement will doubtless appear, at first sight, rather startling and presumptuous, when it is so well known how difficult and tedious is the cure of this common and obstinate disease. Trusting, however, that the perusal of the following pages will remove such an impression, I shall commence by observing, that I have no pretension whatever to the merit of such a discovery. If I mistake not, the public is indebted to Dr. de Roches of London, for bringing this subject to light, shortly after the commencement of the present century. My attention was first directed to it while serving as assistant-surgeon in Montreal, in the year 1808. Our surgeon having been seized with a very severe and alarming attack of rheumatism, I deemed it expedient to call in professional assistance. For this purpose I requested the good offices of our mutual friend, Dr. Selby, a physician of distinguished professional talent and skill. After examining my patient, we retired to consult on the mode of treatment to be pursued, when Dr. S. suggested to me the

* One of the house surgeons of St. Bartholomew's, and another of St. Thomas's Hospital, have been destroyed by cholera in a few hours, since our last.

plan adopted and recommended by Dr. de Roches, adding, at the same time, that he had never found it to fail. This consisted in giving the patient two grains of opium every eight hours. After much opposition on the part of our patient, he at length gave his consent. He was then ordered to provide himself with a large flannel gown, to lay in blankets, and to drink plentifully of tepid diluents.

Our patient soon began to perspire profusely, but to *my surprise*, his symptoms were considerably aggravated on the fifth day. On mentioning this circumstance to Dr. S. he informed me, that such an occurrence was quite common in such cases, but it would cease in the course of the night. This prediction being fulfilled, our patient's sufferings began next day gradually to abate, and continued doing so, till the morning of the eighth day, when they wholly disappeared. From the debility occasioned by the profuse and constant perspiration, it was two weeks, or three, ere he could venture out, but was quite able in another to resume his professional duties. Meantime I subjected the rheumatic patients in the hospital to the same mode of treatment, and was gratified to find it equally successful in their cases.

Having obtained permission to get the old chronic cases, belonging to the regiment, into the hospital, although none of them were at that time worse than usual, the same results followed the same mode of treatment in theirs; and here it may be proper to observe, that patients so cured enjoy an exemption from any return of their former complaint. So far, at least, I can testify from repeated experience.

Case 2.—A gentleman of my acquaintance, belonging to the medical profession, was seized with an attack of acute rheumatism about six years back. Hearing that this case resisted all the means employed by him, and his medical friends, I suggested to him the propriety of using

opium for it. To this he positively objected. His disease continuing to increase in severity, he at length consented to try it, under the firm belief that it would do him no good: and here it may be proper to notice, that a more severe and hopeless case I never witnessed in the whole course of my experience. Suffice it to say, that the violence of the symptoms began to subside on the tenth day, and continued to do so for a few days after, when they all disappeared. Lameness continued for a few weeks, owing to the severity of the disease; but not to such a degree as to prevent him resuming his professional avocations in a very short time after.

I now come, gentlemen, to bring before you four cases of chronic rheumatism, which I have successfully treated within the last two months, the three first belonging to this parish, the other residing in Glasgow. To each dose of the opium I added half a grain calomel, and three grains pulv. antimonialis.*

1.—Widow Currie, ætat 39, a pauper. For three years and a half past, has been more or less confined to bed with lumbago, ischiatica, pain in the lower extremities, and total inability to walk, or even to stand. Having provided her with flannel, and better accommodation, I put her under a course of opium, with the above addenda. In ten days she was nearly free of pain. In ten days more she could rise out of bed without help, and is now walking about with the aid of a staff and an assistant. She derived much benefit, while under the use of opium, from a small allowance of wine, being very weak naturally, and having perspired much. In this case, and the following ones, I uniformly gave the sulphate of quinine for two weeks, with the view of strengthening the system.

Case 2nd.—Mrs. Downes, ætatis 43, having heard of the preceding case while under treatment, made

* Oxidum Antimonii cum phosphate calcis.—*Ed. Pharm.*

application to me. She had been a martyr to rheumatism in almost every part of her body for five years and upwards; when I saw her every joint was swollen and very painful. She had been treated by a variety of medical practitioners, but finding no relief she had made up her mind to submit as well as she could to her unhappy and wretched condition. After eight days of the foregoing treatment, she was greatly relieved and slept soundly, which was seldom or never the case during her long illness. In a fortnight after this she could walk in her little garden without help.

Case 3d. — Donald Mac Arthur, ætatis 55, an old soldier. In consequence of hardships to which he was exposed on foreign service, but more especially in Holland and Germany, he had been subject for many years past to occasional fits of rheumatism, a circumstance I was not aware of till lately, when attending a boy of his labouring under scrofula. Finding him more than once laying on bed with his clothes on, I questioned him about the nature of his ailments, and ascertaining the above statement to be true, and the attacks becoming of late more frequent and severe, though of short duration, I put him on the preceding course of treatment. In twelve days he got quite well, and can walk a distance of six or eight miles without the smallest inconvenience. Being a person of considerable intelligence, he narrated to me lately the following fact, which I think is worth recording, viz. that after using the opium for three or four days, he felt an unusual degree of heat in the parts affected, not of a painful nature however, but gradually becoming less and less, till the pains wholly left him.

Case 4. — Mrs. Robert Hunter, ætatis 75, residing in Glasgow, and occasionally much affected with rheumatism, the attacks becoming more frequent and severe; I put her under the same treatment as the preceding

ones, and I shall only add with the same result.

I could easily add two or three more cases attended by similar results, but this is unnecessary.

To conclude, I have apprized more than one of my medical friends and acquaintances of the improved mode of treating rheumatism as herein related, but could never succeed in getting one of them to make a trial of it.

With best wishes for the prosperity of your highly esteemed Journal, in which every lover of the profession will doubtless join,

I remain, Gentlemen,

Your most obedient Servant,

JOHN BURNSIDE,
Surgeon, and Member of the
Faculty of Physicians and Sur-
geons, Glasgow.

Dalserf, Lanarkshire,
June 26, 1832.

Hospital Report.

CHOLERA HOSPITAL, TOWNSEND
STREET, DUBLIN.

*Cases illustrative of Dr. Murray's
Proposal at page 749.*

CASE I.

June 30th, 1832.

JOHN KEATING, aged 18, having had diarrhœa for the whole of yesterday, was attacked with cramps and vomiting at six o'clock A. M. This day at nine, he was admitted in a state of collapse, with blue, cold, and pulseless extremities, breath cold, eyes sunk, and surrounded by a dark circle, with the lids half closed; lips livid; legs, arms, chest, and tongue were cold and moist; vomits; purging has ceased; cramps of arms and legs; no pulse at wrist.

Frictions and fomentations of turpentine were applied to the limbs, a sinapism to the stomach, and stimulants consisting of turpentine, brandy, &c., given internally. At fifty-two

minutes past one P.M. no improvement having taken place, he was placed in the exhausted receiver of Dr. Murray, every part of his body being covered except the eyes, mouth, and nostrils.

The pump being adjusted, the exhaustion was commenced, and continued fifteen minutes. After the first ten minutes, the breathing became quicker and the breath warm. He expressed himself pleased with the effects produced, and said he was more comfortable and "snug."

In fifteen minutes he complained of feeling faintish, and was removed from the apparatus. The body was now warm and moist, feet warm, but hands cold, and the wrists without pulse; *no cramps were experienced either while he lay in the receiver or afterwards.* He felt a little fatigued on being removed, but was revived by the use of a little warm brandy and water.

It is evident that he has not been injured in the slightest degree by the process. He probably might have derived more comfort and advantage from its use, were it of such a construction as to permit the body being placed in it, and again removed, without much disturbance.

JOHN HART, M.R.C.S.

CASE II,

James Fitzpatrick, ætatis fifty, of broken down constitution and of drunken habits, was admitted into the cholera hospital at the former military depôt, Townsend Street, labouring under the usual symptoms of blue cholera, advanced to the stage of collapse, at 12 o'clock, noon, on 3rd July, 1832; the usual stimulants were used, and he was kept in nearly a stationary condition for about 26 hours, when he began to sink rapidly. As death, under any treatment, was the only result to be expected in this case, he was considered a fair subject to try any means, from which there might result any favourable change, and accordingly it was resolved to try the effects of remov-

ing the influence of atmospheric pressure, by the use of the exhausting bath lately invented by Dr. Murray.

At 7^o 15', P. M. he was placed in the bath; at this time the radial pulse was imperceptible, the carotid 100, respirations 28 in a minute, temperature of body (at axilla) 82; body universally bedewed with cold sweat; face and extremities blue; voice scarcely amounted to a feeble whisper. He remained in the bath 12 minutes; on being taken out the radial pulse was distinct, 117, respiration 40 in a minute; body universally warm to his own sensations; by the thermometer the temperature remained the same as noted already; his voice became firm and of the natural tone.

At 2^o A. M. 5th July, his state was thus: body and extremities warm; pulse 120; respiration 28; voice natural. He was given some brandy, and also carbonate of ammonia. He remained without any unfavourable change for about twelve hours, when he again began to sink; the customary means were employed, but only with the success usual in such cases. He died at five P. M. on the 5th July; twenty-two hours after the trial of the experiment.

THOMAS FERRIAR.

CASE III.

John Thornton, æt. 44, ill six hours, labouring under the usual symptoms of cholera—entered July 5th, in collapse; pulse at wrist perceptible, in the carotids weak and fluttering; was placed in the exhausting bath, in which he remained about twenty minutes; thirst continued, with great impatience for drink; seemed occasionally disposed to sleep, but with no other indication of being influenced by the removal of atmospheric pressure. On leaving the bath, his energies seemed to be somewhat increased, but in a little time he fell into that comatose state, which in these cases is commonly succeeded by death. This morning he appears

a shade lighter, and is now ($3\frac{1}{2}$ P. M.) nothing worse.

J. W. M'KENNA,

Resident Medical Assistant, Townsend
Street Cholera Hospital, Friday.

P. S. Thornton lived till 11 o'clock of the next day after the above notes were taken. The three cases were beyond the reach of art, when at last this process was resorted to, and though death could not be averted, the fatal termination seemed certainly to be delayed.

CLINICAL REPORTING.

THE GENERAL HEADS to be followed in drawing up the Histories of Cases, as attended to forty years ago :—

I. The condition of the patient :

- a. Age ;
- b. Sex ;
- c. Temperament ;
- d. Condition in life.

II. A description of the symptoms with which the patient is affected at the time of drawing up the history :

- A. Evident Symptoms ;
- B. Feelings of the patient ;
- C. State of the principal functions.

- a. Pulse ;
- b. Heat ;
- c. Respiration ;
- d. Excretions.

III. An enumeration of the remote causes which may or are supposed to have had a share in inducing the affection.

- a. The patient's conjectures respecting those.
- b. The accidents to which the patient may have been exposed, previous to the commencement of the disease.
- c. The patient's former state of health.
- d. The diseases with which the parents or near relations of the patient may have been affected.

IV. An account of the influences of the remedies which have been already employed.

1. An enumeration of medicines which have been already used.

2. The effects which have resulted from these.

3. The regimen and situation of the patient from the time of the attack.

4. The effects which have resulted from these.

V. The general heads to be followed in giving reports.

1. The obvious effects from the medicines already employed.

2. The condition of the symptoms.

3. An account of new occurrences.

4. The state of the principal functions.

5. The prescription of medicines.

Cure for the Toothache ; the Yellow Iris.—" But above all," says Ettmuller, " which I have hitherto known, the juice of the root of the Iris latea rubbed upon the tooth which is painful, or the root itself chewed in the mouth, in an instant, as if by charm, drives away the pain of the teeth, arising from what cause soever. He that communicated it to me, affirms that he had tried it forty times at least, with like success. I myself have also at various times tried it, and a great many others have done the same by my persuasion, and I hardly ever knew it to fail." The seeds roasted make excellent coffee, superior to any other substitute.

Johnson's Flora.

New Variety in the Human Species. Winkleman had perceived that the ear was invariably placed much higher in the Egyptian statues than in the Greek ; but he attributed this singularity to a system in Egyptian art, of elevating the ears of their kings, in the same way as the Grecian artists had exaggerated the perpendicularity

of the facial angle in the heads of their gods. M. Dureau de la Malle, on his visit, in May 1831, to the museum at Turin, so rich in Egyptian monuments, was particularly struck with this peculiarity in all the statues of Phta, Meris, Osymandyas, Rhamses, and Sesostris. Six mummies recently arrived from Upper Egypt were at that time under examination, and afforded him the means of ascertaining whether this special character of the higher situation of the orifice of the ear really existed in the skulls of the natives of the country. He was much astonished to find in these, as well as in many other skulls from the same place, of which the facial angle did not differ from that of the European race, that the orifice of the ear, instead of being, as with us, on a line with the lower part of the nose, was placed on a line with the centre of the eye. The head in the region of the temple was also much depressed, and the top of the skull elevated, as compared with those of Europe, from one and a half to two inches. It is somewhat strange that this observation has hitherto escaped the notice of so many *savans* and travellers who have traversed Egypt. As a striking corroboration of so singular a conformation, which may not inaptly be considered the Egyptian type, and a new variety in the Caucasian race, M. Dureau cites as an example M. Elias Boctor, a Copt, native of Upper Egypt, who has been twenty years in Paris, and is a professor of Arabic. He is well known to M. Dureau, who had constantly marked the great elevation of his ears, which indeed had the appearance of two little horns. The Hebrew race resemble the Egyptians in many respects. M. Dureau examined and found that the ears of M. Carmeli, a Jew, professor of Hebrew, although not placed so high as in the mummies or Copts of Upper Egypt, were still very remarkable as compared with those of the natives of Europe.—*Revue Encyclopédique.*

Safety-tube for the Combustion of the mixed Gases, oxygen and hydrogen.
Invented by Mr. HEMMING.

A CYLINDER about six inches long and three-quarters of an inch wide, filled with very fine brass wires, in lengths equal to the tube; a pointed rod of metal, one-eighth of an inch thick, is then forcibly inserted through the centre of the bundle of wires in the tube, by which they are wedged more closely together. The interstices between the wires, which are exceedingly small, are then in effect a series of metallic tubes of very minute diameter; the cooling and conducting power of these is far greater than could be produced if a cylinder of equal length were filled with discs of wire gauze, as the apertures are much smaller than those in the finest gauze, and there is unbroken continuity. All attempts to produce explosion of the gases in this tube, or to compel the flame to return through it, have been ineffectual. Before the Society of Arts, Mr. Hemming exploded the gases repeatedly in the improved safety-chambers, now employed in Gurney's blow-pipe, by permitting small portions of water from the well to enter with them, but he could not explode them in his improved tube under precisely the same circumstances, although they were ignited at the aperture (nearly three quarters of an inch in diameter,) after the jet piece was removed.

Mr. Hemming kept the gases ignited at this large aperture until the extremity of the tube was in a state of active combustion, which was evident by the dense green flame produced; and although the cooling influence was then greatly diminished, no explosion occurred.

The simplicity of its construction will render the manufacture of the article easy and economical; and its perfect safety will enable the chemical operator to dispense with a very expensive and delicate article of apparatus, in the use of which there is always danger and uncertainty.

We have copied the above interesting description of Mr. Hemming's instrument from the first Number of the 1st vol. of the *London and Edinburgh Philosophical Magazine and Journal of Science*, which has just appeared, and which appears likely to add considerably to the advancement of science. We are grieved to perceive that there has not been sufficient spirit in Modern Babylon to support a journal so devoted to science, as the *Journal of the Royal Institution*, which has lately ceased. It augurs badly, and we are almost afraid, would damp the spirit of scientific enterprise, when such works are allowed to fail through want of what Dr. Faraday calls "patronage."

Programme of the Mathematical Prize proposed by the Imperial Academy of Sciences at St. Petersburg, in its public Seance of the 29th December, 1831.

THE successive elevation and depression of the waters of the ocean have occupied the *Savans* in all ages of philosophy; nevertheless, the explanation of the phenomena of tides is owing to the moderns. Kepler was the first to believe that their cause resided in the attractive power of the moon. Newton, attaching the power of the ocean to his great law of universal weight, commenced a mathematical theory, to which his successors, up to Laplace, have added little, but it was considerably improved by this latter.

Nevertheless, since Laplace published his researches on tides, analysis, and especially mathematical physics, have made such progress, as to require a theory more conformable with actual ideas on the constitution of liquids, and which will enable us to reconcile calculation and observation, especially in that which regards the delay of the highest tide under the influence of the full moon.

The Academy proposes to the *Savans* of all countries the following question:—

To determine the motion of the ocean, in considering those forces whose influence may be sensible, and compare by observation the height of tides, and the instant of their arrival drawn from theory.

The heat of the sun, and the unequal temperature at the bottom of the ocean, have doubtless a sensible influence on tides—it would be very important to attend to this point; but then, the great difficulty of the problem may force the authors to renounce the hope of overcoming it; consequently the Academy does not require that the influence of heat on the motion of the ocean be considered, but it requires that the differential equations of this motion be formed, by supposing the liquids composed of disjoined molecule; the demonstration of these equations is an essential part of the question. In regard to their integration, the Academy will see with pleasure the authors attend to terms divided by the fourth power of the distance of the moon; nevertheless, the consideration of these terms is not absolutely required. The Academy will see with yet greater pleasure methods of integration superior to those already known—methods by which may be avoided the ordinary development in series, of functions which depend on attractive forces.

The period of *conours* is fixed for the 1st August, 1833, and the prize is 200 ducats, with the gold jubilee medal, value 50 ducats.

The essay may be in Russian, French, German, or Latin. Each author will transmit with the work a sealed letter, containing his name and address, on the outside of which will be written the motto which heads the essay. They are to be addressed to the perpetual secretary of the Imperial Academy of Sciences of St. Petersburg, who will return to those persons who desire it, their essay, when called for.

The decision of the Academy will be made known in its first public *Seance*, at the end of the year 1833.

The prize essay will belong to the Academy.—*Annales de Chimie et de Physique*.

Contagion.—That indefatigable and determined non-contagionist M. Chervin, has written recently to the French government, urging the necessity and utility of appointing a special commission for the purpose of ascertaining whether the cholera is or is not contagious, and also whether it was imported into France or not, in order to set the question at rest. The government has very civilly declined interfering, not judging that any good would result, and in the belief that the profession would save it the trouble, by publishing its experience on the mode of propagation. M. Chervin was not half satisfied with this, and writes a long letter, urging the ministry to follow up his recommendation. Le Comte D'Argent, one of the ministry, in reply, cut the matter very short, by telling M. Chervin that he could answer all his objections very well, but as it did not become the administration to enter into such a dispute, he would not prolong the correspondence. M. Chervin, of course, cannot make a reply to such a letter, but he does not neglect the opportunity the French Medical Journals afford him of making observations on it, and accordingly he has published the whole correspondence, with his observations by way of *finale*, and these, by the bye, are somewhat of the sharpest, and denote that this physician has devoted his whole mind to the question.

Mydriasis.—Dr. Malvani of Turin, has published a case of this rare affection in the *Journal Complémentaire des Sciences Médicales*. The patient, a man 40 years of age, was under treatment for a year, both by regular practitioners and empirics, before he applied to the Doctor, who proposed to try Dr. Serre's method, namely, cauterizing of the cornea, to which the patient eagerly assented. The

edge of the cornea was touched with a point of the nitrate of silver, and a small eschar produced. The next day the pupil had contracted one-third, and vision was improved. After the third application the vision of that eye, the right, was perfectly re-established—the left remaining bad, that eye not having been under treatment. The Doctor saw him at the end of a year, and found that he was very well, working at his business without glasses. As he could see very well with the right eye, the other being closed, he would not allow that one to be operated on.

LIST OF BOOKS.

AN Essay on the Epidemic Cholera; being an inquiry into its new or contagious character; including remarks on the treatment; as likewise tables of the average rate of disease and mortality recently occurring in London. By JOHN WEBSTER, M. D. Member of the Royal College of Physicians, London; Physician to St. George's and St. James's Dispensary; Lecturer on Materia Medica and Pharmacy, &c. London: Burgess and Hill, 1832. pp. 220.

Observations on the Healthy and Diseased Properties of the Blood. By WILLIAM STEVENS, M. D. John Murray. London, 1832. pp. 504.

A Conspectus of the Butterflies and Moths found in Britain; with their English and systematic names, times of appearance, sizes, colours; their caterpillars, and various localities. By JAMES RENNIE, M. A. Professor of Zoology, King's College, London; Author of "Insect Architecture," &c. William Orr. London, 1832. pp. 287.

Alphabet of Insects, for the Use of Beginners. By JAMES RENNIE, M. A. Professor of Zoology, King's College, London. William Orr. London, 1832. pp. 108. Woodcuts.

On the Structure of the Human Placenta, and its connexion with the Uterus. By ROBERT LEE, M. D. F. R. S. Physician to the British Lying in Hospital. 4to.

NOTICES TO CORRESPONDENTS.

"Mr. St. John Long.—This gentleman recently burst a blood-vessel, and the hæmorrhage on the lungs which followed, caused his situation to be one of great danger. Under the care of Dr. Ramadge he is now advancing towards recovery."—*Sunday Times*, July 7, 1832.

Here is a piece of intelligence which gives the best proof of the infallibility of Mr. Long's practice, which according to *The Legal Ex-*

aminer, of June 30, is as "large and respectable as ever, and is again said to have cured Mr. Brodie's *incurables*," p. 352. It is singular that the author of such a practice cannot cure himself of the first stage of consumption without the aid of his advocate Dr. Ramadge.

This announcement in that respectable and independent paper *The Sunday Times*, speaks volumes, and ought to be sufficient to convince the most hippish and infatuated of Mr. Long's patients and admirers, of his utter incapability to cure himself or others, and of the shallowness of his pretensions as a medical practitioner. If it should so happen that the combined skill of this infallible curer and of Dr. Ramadge should fail to prevent consumption or fatal chest disease in Mr. Long's case, (and it has happened that abler men have failed in curing incipient consumption), it is to be hoped that Mr. Long's secret will be revealed to some person who may turn it to advantage, for the relief of all the nervous, dissipated, and enervated, who fear a thousand imaginary diseases, but whose cure depends upon specious promises, on regularity of life, much more than on any medicine. As a man we wish Mr. Long a speedy restoration to health, as a quack we exult in the exposure of his incompetency, as an infallible curer of consumption and other incurable diseases.

He reminds us of an ancient prince of empirics, who rejoiced in the name of Paracelsus, and boasted that he had discovered the elixir vite, which could cure and prevent all diseases, and yet the discoverer died at the age of 47.

Mr. Long's employment of a physician in his own case, is a strong proof of the credibility of those who swore at the Old Bailey that the rubbing and inhaling systems were infallible. It appears however that both have failed in Mr. Long's own case, and his availing himself of medical advice affords the best evidence of his infallibility. He who had all orders of the aristocracy attesting his unequalled power in curing all kinds of diseases, however incurable, is now obliged to resort to the faculty, having found his own unerring discovery unavailing.

A. B.—Practice of the Surrey Dispensary is, we believe, recognized by the Hall.

Justitia.—In some of the hospitals, the difference between 'the fee for six months' attendance, and for a year, will be received; in others, where the officers are mercenary, two six months' fees are required. Our correspondent should inquire of some one of the surgeons of the hospital he mentions. He need have no delicacy in so doing.

A Constant Reader.—Many thanks for the information; we shall turn it to good account in applying for a new trial.

Zeta.—The attack deserves nothing but contemptuous silence.

A Surgeon.—It is very true, that our defence of the character and dignity of the profession, and of the many eminent phy-

sicians and surgeons in London, has led us into the meshes of the law, and it is equally true that those whom we defended seem the most unmindful of it. This is human nature, and corroborates the old maxim, *Donec eris felix multos numerabis amicos; nullo amicus ibi admissas opes*.

A Reformer.—There will be an effectual and speedy reform, and one which will surprise the faculty, when they least expect it. This will be effected by the uncompromising, zealous, and honest exertions of a gentleman, who has done more for the cause than any other reformer in the kingdom. The London College of Medicine has died of cholera, and other rival institutions have caught the contagion; but a reformed Parliament has discovered an effectual remedy, which is called *transfusion*.

St. Mary-le-Bone the Great.—A representative vestry now exists in this parish, which has exposed the most iniquitous jobbing ever attempted, and has put the aristocracy and ecclesiastical jobbers to flight, while it is determined that the medical officers shall be fairly remunerated, as well as butchers, bakers, &c. &c. It is monstrous that the parochial physicians and surgeons of such a parish as Mary-le-Bone should be expected to give their services gratuitously, when more than 30,000*l.* annually is expended in parish expenses. We speak advisedly when we state, that the present vestry will effect the most advantageous changes, which will extend to every parish in the kingdom, and benefit the medical profession to a degree little expected, though well deserved.

The members of the profession, who consider the damages awarded in the case of *Ramadge v. Ryan* excessive, have commenced a subscription to enable the defendant to apply for a new trial.

SUBSCRIPTIONS RECEIVED.

	£.	s.	d.
Dr. James Johnson	10	10	0
Dr. Uwins	2	2	0
Dr. Tweedie	5	5	0
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London Medical and Surgical Journal.

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SATURDAY, JULY 21, 1832.

VOL. I.

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,

During the Session of 1831 - 32 ;

BY BARON DUPUYTREN,

PRINCIPAL SURGEON OF THAT HOSPITAL.

*Traumatic emphysema of the Eyelids and
Temporal Region.*

THE introduction of air into the subcutaneous or inter-muscular cellular tissue, does not complicate penetrating wounds of the chest only; it may take place in all the regions, near the respiratory organs. Emphysema of the eyelids is not a rare disease; many authors have mentioned it, and more than one case has occurred at this hospital.

*Emphysema of the Eyelids, consequent on a
presumed fracture of the pars planum of the
æthmoid bone, or the os unguis.*

A quantity of earth fell on the right anterior part of the head, neck, and chest of a labourer, about 25 years old. When freed from the earth, he merely felt a slight pain at the root of the nose, to which he paid no attention, and continued his work. About a quarter of an hour afterwards, while blowing his nose, considerable tumefaction of the eyelids, to the left, suddenly occurred; so much so, that the eye was entirely covered. What is the cause and nature of this tumefaction? Is it erysipelas? The skin is, in fact, shining and tense as in that affection, but there is not that more or less intense redness, not that ardent heat which characterize it; the eyelids preserve their colour and natural temperature. Is it œdema? But œdema does not form so rapidly, and besides there is not present that pitting of the tissue so

evident in serous infiltration. Has this man, in consequence of the fall of the earth on him, suffered such a contusion, that an effusion of blood has taken place? But in that case there would be numerous violet ecchymoses, and it would be recognized by the general brown colour, more or less distinctly marked, of the eyelids. From these negative signs, every thing leads us to believe that it is an infiltration of air; and in fact, on examining the part attentively, emphysematous crepitation could be readily distinguished, as many of you discovered; and this not in one part only, but over the whole extent. It is useless to demonstrate to you by facts, that this crepitation is the characteristic sign of the presence of atmospheric air in the cellular tissue of any tumefied part. Whenever in similar cases, the skin has been punctured with a bistoury, a certain quantity of an elastic fluid has been seen to escape by the openings. On the bodies of those who have died, either from the severity of the emphysema, or the effects of the concomitant organic lesions, the presence of this fluid has been recognized wherever crepitation was observed during life. Having had a person under my care in whom this phenomenon was very evident, circumstances induced me to puncture the tumefied part with the bistoury, when a large quantity of air escaped by the incisions; so that there can be no doubt in regard to that symptom. But in the case now before us, it is necessary to ascertain how this infiltration could occur. I suppose that the earth which fell on him, having exercised very great pressure on the face, a fracture of the pars planum of the æthmoid or os unguis took place, and that air thus passed from the nasal fossa to the eyelids. A rather remarkable circumstance is that the emphysema did not form immediately, but at the end of a certain time, after the patient had made several efforts to blow his nose. The cause of this particularity is not inexplicable; without a doubt the fracture of the pars planum or the os unguis not having caused a rupture of the

soft parts lining them, these latter prevented the passage of the air; but the patient having afterwards violently driven a strong column of air against these parts in the act of blowing his nose, they were torn, and a free communication thus established between the nasal fossa and the eyelids. I was desirous of ascertaining whether, after the accident, he had lost any blood by the nose, as all the other patients whom I had seen in similar circumstances, had presented that symptom. In this man however it appeared, after a strict examination, that it did not occur.

The treatment consisted of general bleeding, and discutient applications to the base of the orbit. The patient was especially advised not to blow his nose, to avoid coughing, or any action which might renew the passage of the air through the presumed opening, and I announced that he would be well in a few days. In fact, on the third day after his admittance into the hospital, the crepitation had diminished considerably; the fourth, it was scarcely to be perceived; and the fifth, the eyelids were almost in their natural state.

The following case is somewhat analogous to the preceding, from which it chiefly differs in the seat of the injury, the cause of the emphysema.

Emphysema of the Eyelids, consequent on a presumed rupture of the pituitary membrane.

Another young man having received a violent blow on the nose by the fall of a plank, it at first caused only severe pain; but a few hours afterwards, having blown his nose with force, he felt as if a flash of fire darted from the sides of the nose to the angle of the eye, and expended itself in the left upper, and lower eyelids. These immediately became so tumefied, that the eye was suddenly covered, and the passage of light intercepted. He was taken into the Hôtel-Dieu. The eyelids were considerably stretched, and elastic, but without change of colour, and emphysematous crepitation was discovered. The same measures effected a cure in four or five days. I consider that the blow received by the patient had occasioned a rupture of the pituitary membrane opposite the union of the lateral nasal cartilage, which may have been detached from the ossa nasi.

Emphysema of the Temporal Region, consequent on fracture of the Frontal Sinus.

Emphysema may be produced in the most elevated parts of the respiratory passages, by causes more serious than those in the preceding cases, of which the following is an example.

A man fell on the forehead; some time afterwards a voluminous tumor formed in the temporal region; it was rather difficult to ascertain its nature, until by gentle pressure I made it pass towards the anterior part of the forehead, and entirely disappear. It was

the result of the passage of the air into the surrounding cellular tissue from the fractured frontal sinus, which was open under the skin.

It would be easy to multiply cases of traumatic emphysema, dependant on penetrating wounds of the chest, or by a communication of another kind, caused by external violence on other parts of the air passages. But it appears to me that the cases which have been adduced, and the considerations drawn from them, are sufficient to give an exact idea of this singular kind of disease to make known on what the diagnosis is founded, and the treatment which should be pursued. I have now a few words to add relative to the infiltration of air in the more elevated parts of the respiratory apparatus. Besides the crepitation which has been called emphysematous, and the negative signs already indicated, we may also perceive that whenever, to be certain of the nature of the disease, we direct the patient to blow his nose, the tumefaction, whether of the eyelids or other parts, is sensibly increased. If we have to do with a patient who is insensible, by pinching or closing up the nares, we can cause an instant increase in the size of the tumour, which is induced by preventing the column of air from being expired, and which is consequently carried into the new passage thus accidentally established. In all cases of emphysema of the eyelids, the tumefaction forms very rapidly, owing probably to the great laxity of the cellular tissue of those parts.

[In the course of this lecture, M. Dupuytren referred frequently to a lecture on traumatic emphysema delivered by him at the Hôtel-Dieu, a report of which will be found in No. 15.—Eds.]

HYDRO-SARCOCELE.

Case remarkable on account of the difficulty of diagnosis.

A short time since a physician of the marine came to consult me for an affection of the left testicle; it had been considered as hydro-sarcocele by many gentlemen who had examined it. During infancy the left testicle did not descend into the scrotum; a tumour of a variable size appeared frequently in the course of the spermatic cord, descended more or less, sometimes even into the scrotum, and then gradually re-ascending, disappeared again in the inguinal ring; it finally fixed itself out of the abdomen. The existence of hernia was undoubtedly credited, for from his childhood, he has constantly worn a truss. This fact must be attended to, as it must have exercised considerable influence on the modifications which took place later in those organs; for we may take it as a rule, that whenever the truss is not useful, it is almost always hurtful; it exercises a constant, sustained pressure, the effects of which are almost always injurious; it has sometimes caused swellings of a squirrhous nature. However,

for several years the patient, whose age is now thirty-two, has ceased wearing it. A circumstance to which attention should also be directed is, that the tumour often presented very considerable variations in its size. During a voyage for a year which he had been obliged to make, it increased considerably. On his return fluctuation was perceived at the anterior and inferior part; above and behind this fluctuation, a hard body was felt. When I saw the patient for the first time, I thought, in fact, that there was a collection of fluid, but it was difficult, from the history, to decide what the hard body was which I have just mentioned; I was inclined to consider it as a swelling caused by an adherent hernia; I contented myself with advising repose, baths, and topical emollients, after which I endeavoured to reduce it, but unavailingly.

The patient, whose affairs required him to undertake another long voyage, was determined to be rid of his disease at all risks. The position was a very embarrassing one to the operator; there was, in truth, a collection of fluid, but nothing else could be ascertained. In the first place it is often very difficult to distinguish hydrocele, with a cartilaginous thickening of the tunica vaginalis, from sarcocele; but besides, it was necessary to ascertain whether the hydrocele was the only disease, or whether it were accompanied by sarcocele, swelling of the testicle, or hernia, and, if the latter, whether the hernia had or had not contracted adhesions; for one or other of these hypotheses might be true. Every kind of these complications are met with, and according to them was my conduct to be regulated. I at first intended to make an explorative puncture; but it was then requisite to determine how it should be done. The use of the trocar, innocuous and very proper in cases of simple hydrocele, would prove very dangerous if the tumour were formed by an enlarged testicle, without degenerescence, or by the presence of the intestine; either of these organs might be wounded. On the other hand, if there were sarcocele the puncture would be useless.

These considerations determined me to open it with a bistoury; an incision, about an inch long, was made in the integuments on the lower part, prolonged a little backwards, and the parts carefully divided until I came to the sac containing the liquid, which was of a bluish colour, and elastic. Having pierced it with the point of the bistoury, a liquid escaped resembling that of pure hydrocele. Being desirous of preventing its infiltration in the cellular tissue, I enlarged the incision, when the quantity which escaped amounted to about eight or ten ounces. The tumour lost only two-thirds of its volume; and we might then see very evidently that its remains, the hard body already spoken of, was the testicle itself. But in what state was it? That was an important question to de-

termine. Its swelling might depend on a venereal, scrofulous, or external cause. On questioning the patient, it appeared that he had only had a running for about five or six days; on the other hand, although there were a few indications of scrofula about him, they were not sufficiently marked to warrant me in concluding it to be of strumous origin; the patient had a good constitution, and had always enjoyed good health. Every thing then led us to believe that this tumefaction was the result of the compression exerted on the testicle for so many years by the truss employed to keep up this herniary tumour. Supposing it to be of venereal origin, should I stop the operation there, re-unite the wound, and endeavour to obtain its resolution by anti-syphilitic measures? It may easily be conceived, that my decision in this respect would depend on the more or less positive knowledge that might be acquired relative to the state of the organ, whilst the appreciation of the circumstances just enumerated could serve us only in calculating the chances of amputation.

Having carefully examined the testicle, I found its surface very unequal; it was hard and almost indolent; this hardness was especially remarkable in the epididymis, which had acquired a very considerable size. There were therefore very good reasons to believe in the degenerescence of the greater part of the organ, and I therefore determined to remove it. But being previously desirous of ascertaining the state of the upper part of the spermatic cord, which I found to be healthy, and of the inguinal ring, I reached the latter without difficulty, and found it freely open, I could then readily conceive how the volume of the tumour had varied so considerably, as I believed to be dependant on the protrusion and spontaneous reduction of an intestine. But how was it that the tumour containing the liquid was not returned into the abdomen during the efforts made in such a state of the ring? This was to be explained by the appearance of the epididymis, which was placed against the opening of the ring, and completely closed it up. It is known that in dogs a fold of the peritoneum, placed there like a sucker, prevents the return of an injection into the tunica vaginalis. In this patient, this anormal condition of the epididymis performed the natural function of the peritoneum in dogs.

In consequence of this particular condition of the ring, the operation might be followed by two accidents equally unpleasant. On the one hand, a portion of intestine might be protruded, and fix itself in the wound, as it sometimes happens in the operation for strangulated hernia; on the other hand, if hæmorrhage were to supervene, the blood, effusing itself into the peritoneum, would cause violent inflammation of that membrane. To prevent this the vessels of the cord were tied

with great care, as were also the vessels of the integuments.

Let me now recapitulate the circumstances of this interesting case. The tumour consisted of a collection of fluid, the anormal size of the testicle, and, accidentally, by an intestinal hernia. This collection of fluid, in all about eight or ten ounces, was the product of the morbid secretion of the tunica vaginalis, and constituted a real hydrocele. Although the inguinal ring was widely open, the communication between the tunica vaginalis and the cavity of the peritoneum not being free, which was dependant on a particular disposition of the lower part of this canal, it had not been possible to reduce the sac containing the liquid. In regard to the determination which I formed of removing the testicle, I believe it was the wisest. The operation, it is true, was painful, long, and difficult; but that is nothing to be compared with the accidents which might occur from the ulterior progress of the disease, or from any other operation. However, the pathological examination of the testicle itself will decide whether I have acted right or wrong. It has more than three times its natural size; divided with a bistoury, it shows carcinomatous appearances of the first degree, that is, without degeneration or ramollissement. This is a happy circumstance, as it affords a greater chance for the ultimate cure of the patient. The epididymis, which is at least four times its natural size, is in the same state. The general constitution of the individual, the integrity of the cord, and the presumed nature of the cause of this affection, lead me to suppose that the cure will be radical.

SELECTIONS

FROM THE

LECTURES

OF

SIR GEORGE L. TUTHILL.

VESANIA.

THIS order comprehends the disorders of the faculty of the judgment, without any pyrexia or coma.

Amentia.—*Fatuity* or *Defect of Intellect.*

There is here an imbecility of the judgment, so that the relations of things are not perceived or remembered. This resembles idiotism, and is frequently from birth, or from some malformation of the cranium. This disease is divided into three species.

Amentia Congenita.—This generally exists from the time of birth, or is occasioned by some imperfection of the parts with which the understanding is connected. This admits of no relief.

Amentia Senilis is caused by a decay of the faculty of perception in advanced life, and very frequently occurs in those who were formerly considered as clever men. This species of *amentia* cannot be cured.

Amentia acquisita.—This arises from external causes, in men of previous sound understanding, as from a fracture, or from any great violence of that nature done to the head. This is also incurable.

Melancholia is partial insanity without dyspepsia. Insanity is present when the relations of things are falsely perceived by the patient. There is false conception present in every species of insanity, and this false conception being acted upon, constitutes the essence of maniacal disorder. By partial insanity, is meant, where the patient is absent upon one subject only. The difference between this and hypochondriasis is, that dyspepsia is a frequent attendant upon the latter. Melancholy will vary according to the circumstances producing it.

The first species may arise from the state of the patient's health, which, from slight causes he may suppose to be bad; or it may arise from a perpetual anxiety in the patient's mind, on his own affairs; this nearest resembles hypochondriasis. There perhaps the patient might be distressed from a cause which might possibly occur, but here he is anxious on a subject which is totally false. This species is called, by some writers, *melancholia vulgaris*.

The second species is totally the reverse of the first. Here the patient may suppose himself as rich as possible, when he may not be worth one farthing; or this species may also arise from a false conception of the state of the patient's affairs, which may be *prosperous*.

The third species depends upon love. This will vary in different cases; the patient may or may not be depressed in spirits, and this may give rise to other forms of melancholia; the patient may become thus affected from being either refused or accepted.

The fourth species may arise from supposing, from some reason unexplained by the patient, that he is abandoned by heaven. He gradually wastes away, refuses food, has no sleep, and is in a state of constant suffering.

The fifth species is accompanied by an aversion to motion, and to perform the common offices of life; the patient is very dejected, and will explain nothing, and will remain in the same position for days together.

The sixth species is where the patient is always in motion, and never at rest; he cannot sit down—is constantly walking, and in a state of perfect restlessness, and at the same time generally melancholy.

The seventh species is accompanied with a desire to die, and is by some supposed to be more frequent in England than elsewhere; it arises from no apparent cause.

The eighth species arises from a morbid conception of the patient's sex.

Mania.—In mania the insanity is universal, and there is a false conception upon every subject. Mania is divided into several species.

Mania mentalis, where it arises from affections of the mind, which are various.

Mania corporea, arising from corporeal causes, as in women during pregnancy, or after delivery, which latter is called *puerperal insanity*.

Mania obscura, where it is not preceded by any evident affection of the mind or the body; and where, therefore, the cause is not manifest.

In mania, there is a frequent transition from one species of it to another, in the same person, at different periods of life. The treatment does not depend upon the disease, whether it be mania or melancholia, but upon the temperament of the patient, upon his general habit of body, and his general state of health. Among persons who are confined, many may have violent and rapid succession of ideas; and in others, the thoughts will succeed each other very slowly. When the patient's ideas are rapid, he will be either violent or foolish; and with some, their spirits will be quite gay and harmless. Although there is no pyrexia present during the fit, it is frequently preceded or accompanied by head-ache, and violent throbbing of the carotid and temporal arteries. The sensorium is not acted upon as in a state of health, the patient is incapable of directing his attention to any particular object from the rapid succession of his ideas; the judgment is always prompt and positive, and the patient greatly relies on the accuracy of his own ideas on various subjects—for in his opinion, nothing can weaken or shake them. The passions of the mind are frequently expressed with great extravagance, and the hatred of the patient, wherever it is directed, is very great; if irritated, he becomes furious; he is perpetually fancying himself injured, and that every one around him is his mortal enemy; some objects are painted by him in the wildest colours, and one single *error* may perhaps produce all these. If the patient be not now confined, he becomes intractable and furious. This species of mania is characterized by a quick succession of ideas.

Another species of mania is where the ideas are quick, but gay and good humoured, and in such cases the height and exhilaration of fancy subvert all that education had previously formed; those who when in possession of their faculties were most quiet and retired, become gay, noisy, and frivolous. When this species of mania affects men, they fancy themselves kings, and women consider themselves queens. Sometimes they scorn all earthly distinctions and fancy themselves

equal with the Deity, and this occurs in that form of madness where the ideas are slow; the countenance becomes gloomy, and the patient is solitary and suspects all around him, becomes fearful, and fancies himself guilty of enormous crimes, deserted of heaven, and wishes for death; and if he be not narrowly watched, he will put a period to his existence. He will sometimes fancy himself ruined, or his thoughts may be fixed on some female, and he will sink into gloomy despair. The patient will not be always in the same state; the paroxysms will remit, the ideas change, and the furious become calm, &c.

A casual observer, on conversing with a patient during these remissions, may not perhaps discover the patient's aberration of mind, but when he lights upon one particular topic, it then becomes evident; these remissions are called lucid intervals; these must be watched very narrowly by those accustomed to it, as otherwise the patient is sometimes so cunning as to put on the appearance of a remission. In some cases the memory is impaired, in others it is not.

Those whose minds are frequently fixed on one object for a length of time become fatigued. Young children who are remarkably clever at an early age, frequently become imbecile about puberty; the senses of taste, feeling, and smelling, as well as those of seeing and hearing, are also frequently affected. Some patients fancy they see persons who are addressing them, and they frequently employ the greater part of the day in answering those questions which they imagine are put to them. This habit sometimes becomes permanent, and no external objects are able to fix the attention of the patient; he will do nothing without he imagines it is the wish of these persons whom he fancies are addressing him. When in a furious paroxysm, some know nothing of what has occurred; others are enabled to recollect every circumstance connected with it. Maniacal patients are generally worse at night, and the horizontal posture is supposed to have a tendency to bring on a paroxysm, and some patients are so well aware of this that they will not lie in a horizontal posture. Those who are violent will continue in action for a long time, as beating with their feet upon the ground; and those who are enabled to recollect this, mention it as affording them considerable relief.

In all there is a degree of wildness, cunning, and distrust, expressed in the countenance; paroxysms frequently recur with violence after the remissions, producing such a derangement of the contents of the cranium as ultimately to induce paralysis, apoplexy, &c.

OF THE
SCIENCE OF THE PULSE,

And its Modifications in Health and Disease.

By M. RYAN, M.D.

(Continued from Page 673).

IN the preceding paper on this subject there was an account of some of the internal and external causes which modify the pulse; and these are so numerous that many eminent physicians of our own time place little reliance on the diagnosis afforded by arterial pulsation. It is to be regretted that Dr. Mason Good has very much decried the doctrine of pulsation, though there are few medical practitioners of any experience that will assent to his conclusions. The examination of the pulse as the characteristic of the circulatory system, cannot be omitted in ascertaining the nature of acute disease. It would be absurd to depend upon it alone, or upon the examination of respiratory, digestive, or nervous system; we must carefully investigate the conditions of the whole when learning the history of our patient's case. Though the pulse will vary in consequence of an immense number of collateral circumstances, yet we can safely depend upon most of its characters, as fullness, softness, smallness, &c. and hence deduce our indications of treatment. Some writers, as Bordeu, Fordyce, &c. have too finely elaborated the sphygmie art, and rendered its variations so numerous and complicated, as almost to defy comprehension. Heberden remarks, "such minute distinctions of the several pulses exist chiefly in the imagination of the makers, or at least have little place in the knowledge and cure of diseases." Dr. Hunter could never feel that nice distinction in the pulse that many others did, and Mr. Hunter held that the nicer peculiarities in the pulse are only sensations in the mind. Admitting both these positions, they do not prove that the study of the obvious modifications of the pulse is useless to the medical practitioner. In fact, it cannot be denied that the pulse depends on the contraction of the left ventricle and of the arteries, and is a precise index to the modifications, however varied, of the activity of the circulatory system. In making this assertion I am aware of the opinion of Dr. Parry of Bath, "that no increase of size, or indeed change of bulk takes place in the arteries during either the systole or diastole of the heart's ventricles in a state of health, and that it is the pressure of the finger against the side of an artery that occasions pulsation, in consequence of the resistance hereby made to the regular flow of blood, the alternating beat being produced by the greater momentum with which the current strikes against the finger, or other cause of obstruction during

the systole than during the diastole of the heart." Dr. Good comments upon this opinion, and states that pulsation will be felt in a leaden-water pipe while the pump is worked upon at one end. According to these doctrines there should be pulsation of the veins, as the blood is propelled through them, which every one knows is not the case, unless in certain rare diseases. It would far exceed the limits by which I am circumscribed, were I to enter upon the functions of the heart and arteries; and it would be contrary to the object I have in view in writing this paper, which is to inform students and junior practitioners of the diagnostics afforded by the arterial pulsation.

I have already described the normal state of the pulse in a state of health in both sexes, in different ages, and under a variety of circumstances. Climate, habit, constitution, and temperament will modify the pulse. Physicians have divided the arterial pulsations or pulse into *diagnostic, organic, and critical*; but the first and third of these only are studied in our day. The *diagnostic* pulses were described by Galen as the great and small, the hard and soft, the strong and weak, the quick and slow, the frequent and rare, the equal and unequal. M. Bordeu applied the doctrine of the pulse as an index to the diseases of every organ in the body, and hence he necessarily described an immense multiplicity of *organic* pulses. These he subdivided into superior and inferior pulses, or as the organs were above or below the diaphragm. *Recherches sur le Pouls par rapport aux crises*, 1756. *Good's Study of Medicine*. But Rucco, in his learned treatise on the science of the pulse, asserts that Fouquet was the author who raised up the doctrine of organic pulses, which was in its infancy before he published his work on the subject in 1767.

This hypothesis became popular in every part of Europe, but is now abandoned by the faculty, in general, though recently revived in France (*Dic. des Sciences Med.*) and in this country by Rucco. The critical pulses have been described by many renowned physicians, and by writers of distinction, as Galen, Aëtius, Salius, Alpinus, Struthius, Hoffman, Solano, Nihell, Senac, Bordeu, Cox, Fleming, and others. All the works upon the pulse tend to shew the value of this sign in the diagnosis and prognosis of disease.

There are certain rules which must be observed in making the exploration of the pulse; 1, we should be acquainted with the characters of the pulse in the different periods of life, in the sexes, temperaments, according to corporeal development, and as influenced by moral and physical causes. It is manifest that without this knowledge we cannot distinguish with accuracy, its conditions in various diseases; 2, the temperature of the hand must not be too high or too low, and that of the patient must be taken into consideration; 3, the examination must not

be made on entering the chamber of the sick, as the approach of a medical practitioner generally agitates the mind of the patient, and causes an increase of the moral and physical force, and consequently of the action of the heart and arteries. This fact must be remembered whenever the physician is a stranger, and attends for the first time. The pulse will be also accelerated after the ingestion of food, stimulating drinks, exercise, mental emotions, more especially when the patient is delicate or feeble, and also after laughing, coughing, groaning, hiccuping, crying, or much speaking. It is therefore difficult to explore the pulse, in consequence of these inconveniences, but an attentive and cautious practitioner will remedy all of them, by feeling the pulse soon after his visit, and again before his departure; and by carefully estimating its characteristic on both these occasions, he will generally arrive at a correct conclusion. It is held that the exploration of the pulse is most correct in hospitals, where patients expecting the medical attendants, are free from emotions and all excesses; 4, the patient should be placed on his back, or in the sitting posture, with the arms free from pressure, or he should repose on his side, and in such case the pulse in the upper wrist must be felt; 5, the index and middle fingers are to be applied over the radial artery, a little above the styloid apophysis of the radius, and the fore-arm being slightly flexed between pronation and supination. The thumb is to be placed on the posterior surface of the radius. Dr. Rucco recommends the four fingers along the artery, as in certain diseases the pustile force may differ in a short extent of the artery, and may not be detected, unless the fingers are applied as he suggests. Too much pressure must not be made with the fingers, as it would stop the pulse, or change the position of the artery, and lead to an erroneous conclusion. The fingers ought to be removed from the artery for a few seconds, as their sensibility will be diminished by much compression. In many cases the artery cannot be felt by the ring and little fingers, and in most persons, the sense of touch in these is much less than in the index and middle fingers. In fat people, considerable compression is requisite to feel the pulse, in consequence of the quantity of cellular membrane which covers the artery. In old persons there is little fat, the arteries are superficial; little pressure with fingers is necessary, as we can often observe the pulsation. There is no rule as to the length of time requisite for the examination of the pulse. It is necessary to feel the pulse in both arms, as there is always a difference in the radial arteries, that of the right arm being larger; and the pulsation may be regular in one, and irregular in the other wrist, or it may be absent for months in one arm (Parry) or in both, according to Haller and Jackson.

In the last case, the radial arteries either deviate from their usual course, by turning over the radius higher than the wrist, or they may take their ordinary tract, and yet not pulsate. In such instances, the carotid, temporal, or brachial arteries must be examined, or the heart itself. The pulse may be full in one wrist and small in the other, and hence the necessity of examining both. It has been said that we should feel the left wrist with the right hand, and reciprocally; but this is unnecessary, as the sense of touch is the same in the fingers of both hands, unless when they are indurated in one who has practised much on some stringed instrument.

In the natural condition the pulse is easily felt, it is regular, soft, not too frequent nor too slow. In the adult it beats about 65 or 70 in a minute, the pulsations being at an equal distance from each other. Sir J. Floyer said that the pulse of a healthy man was about 75 in a minute. *The Physician's Pulse Watch, or an Essay to explain the Old Art of feeling the Pulse, and to improve it by the help of the Pulse-Watch.* Lond. 1707. I have already described the variations of the pulse at the different periods of life, and have now to add a few other particulars. Dr. Heberden attended a man of 80, whose pulse was 26 in a minute; and another in whom it was only 12, while Lizari informs us that he found it only 11. *Racolta d' Opuscoli Scientifici*, p. 256. It may be counted, according to Frank, to 200. *Di Cur. Hom. Morb. Epit.* tom. iv. page 175. The late Dr. Gregory, of Edinburgh, mentioned in his lectures, that his colleague Monro, 2dus, stated the same fact; and Wendt counted it at 243. *De Mutatione quadam Pulsus insigni.* Erlang. 1778. Dr. Sanders of Edinburgh, stated in his lectures, that if a healthy man had run for some time, the pulse could be easily reckoned at 200 in a minute.

The pulse is not of the same frequency in any two individuals. It is very feeble in some, indeed scarcely discernible, though the health is excellent. In old persons, who are thin, it is generally strong, and may deceive a young practitioner. Tumours may press on the brachial artery, or this vessel may be aneurismal, and in both cases the pulse will be affected at the wrist. The right arm is larger and more developed in most people; the pulse is larger or fuller, while the reverse occurs in the left-handed. The pulse will be full in one arm, and indicate venesection, while it is small and soft in the other, and seems to require stimulants. When this diversity exists, we should feel the heart. But sometimes the pulse is full at the heart and small at the wrist, as in contraction of the auriculo-ventricular opening. There may be extensive disease of the heart, and the radial pulse be natural. Auscultation will enable us to determine most of the diseases of

the heart, and ought to be universally studied by medical practitioners.

The illimitable varieties and modifications of the pulse led Celsus to call it a *res fallacissima*, and Parry to denominate it a deceptive criterion. Nevertheless the pulse greatly assists us in our diagnosis, prognosis, and therapeutics. Its modifications are—*frequency, slowness, force or strength, rhythm, and regularity*. In the state of disease, the pulse is *frequent or rare, quick or slow, hard or soft, great or small, strong or feeble, regular or irregular, unequal, intermittent, and insensible*. One, two, or three of these qualities may be combined.

Pulsus frequens, frequent pulse, exists when the number of beats in a minute exceed those in health at the different ages. This was said to be a sign of febrile diseases by Galen, Boerhaave, Hoffman, and a host of others; but Fordyce well observed, that fevers might exist and prove fatal without this symptom.—*Dissertation on Simple Fever*, p. 70. This condition of the pulse is generally observed in febrile and inflammatory diseases.

Pulsus rarus, slow or sluggish pulse, was opposed to the frequent, and also beats less than the natural. It depends on diminished irritability in the heart, and is caused by cerebral oppression, as in apoplexy, compression of the brain, hydrocephalus, narcotism, and intense cold. It is sometimes called a jerking pulse; it is a bad sign in fevers and cerebral affections.

Pulsus celer, quick pulse, is generally confounded with a frequent one, as is well illustrated by nearly all the translators of Dr. Cullen's *Nosology*, who render his *pulsus frequens* a quick pulse. The first is that in which the artery suddenly strikes the finger, causing a fewer number of pulsations in a minute, while the second is that in which there is a great number of pulsations in the same space of time; so that the pulse may be quick and rare, slow and frequent, quick and frequent, slow and rare. Darwin has well explained the distinction in question. The pulse will often be slow as to number, but quick as to the impression on the finger, as in apoplexy and cerebral oppression from narcotism. "We must not," says Darwin, "confound frequency of repetition with quickness of motion, or the number of pulsations with the velocity with which the fibres, which constitute the coats of the arteries, contract themselves."

Pulsus iners vel tardus, a slow pulse, is opposed to the *quick*, and has relation to each pulsation; it arises from the same causes as the rare pulse. When this occurs in fevers and other acute diseases, it indicates a favourable change.

Pulsus durus, a hard pulse, is compared to the stroke given by the string of a musical instrument; it is supposed to depend on the contraction of the muscular coat of the artery;

it is small and generally quick; it indicates enteritis, peritonitis, and, according to Hoffman, "pain, spasm, and convulsion."—(*De Pulsuum Natura*, &c. p. 17.) When small at the same time, it is sometimes called a *wiry* pulse. Hoffman said it was caused by spasm of the heart and arteries; Hunter referred it to this condition of the latter alone (*Treatise on the Blood*); and Fordyce to incipient contraction of the artery (*Dissert. on Simple Fever*). It is found in pleuritis, synocha, inflammations, and acute rheumatism, but in such cases it is strong and full. It is sometimes called an obstructed pulse; it requires venesection, and if small becomes fuller, and the blood on cooling exhibits the buffy coat.

Pulsus mollis, a soft pulse, is caused by relaxation or debility of the muscular coat of the artery; it is often weak and sometimes dull; it supervenes on the hard pulse after venesection, and often accompanies convalescence, and in disease indicates a remission or improvement. But it is not always favourable, for we find it in protracted pneumonia, and then it is weak (*Boerhaave Institut. Rei Med.* 962, Cullen cccxxvi.) while in the accession of continued fever it presages that the disease will be formidable, and that there will be great debility in the last stage (*Fordyce Op. Cit.* p. 53). It is more common with the female than with the male; is often induced by vomiting, and is a sign of delicate or bad health.

Pulsus magnus, a great pulse, is said to be present when the artery dilates more than naturally, though the number of pulsations may be normal or rarer. This quality is supposed to arise from weakness, and not so much from fullness of the artery; and therefore it is inferred that the pulsations are slower than when the pulse is the stronger. It exists in coma, vertigo, and lethargy, and these disease are more dangerous, the greater the pulse.—(*F. Home Principia Med.* p. 228.) This pulse seldom indicates venesection.

Pulsus parvus, a small pulse, was opposed to the great, and was attributed to a want of power in the heart to propel the blood, as in cases of debility; or to a contracted state of the artery, as in enteritis, &c. When it occurs in typhus, after hæmorrhages and fluxes, it is usually soft, weak, and frequent; indicates great debility, and requires more opium and stimuli. It is a bad sign towards the termination of typhus, visceral, and other inflammations, small-pox, measles, scarlatina, intestinal irritation, scurvy; in a word, it indicates great debility, or prostration of the vital powers. But when the pulse is small, hard, sharp, or wiry, as in enteritis, peritonitis, carditis, &c. it requires venesection, by which it becomes fuller and softer.

Pulsus plenus, a full pulse, is that in which the artery does not narrow itself after each dilatation, but on each pulsation percusses the finger with a full, soft, obtuse stroke; it gives a weaker stroke to the finger than an

artery, whose pulse is stronger and freer, which is called *great*, as already described. It was said to depend on plethora; it precedes natural or difficult menstruation and hæmorrhages; it may be quick or slow, and in general requires venesection.

Pulsus validus seu fortis, a strong pulse, depends on the energy of the ventricular contractions, and often upon hypertrophy of the left ventricle. Those who enjoy good health and constitutions, who pursue laborious employments, and who live regularly, have this kind of pulse. It is characteristic of synocha, various inflammations, hæmorrhages, especially from the nose, lungs, stomach, intestines, kidneys, uterus, and other parts of the body, and often precedes perspiration, by which intermittent and remittent fevers terminate. It shows that the sanguineous circulation is vigorous, that the vessels are easily excited, and it admonishes us of the necessity of diminishing the mass of blood; it indicates plethora, and warrants depletion.

Pulsus debilis, a weak pulse, exists when the artery dilates very sparingly, indicating a low degree of irritability in the heart and exhaustion of the vascular system; it is generally frequent, thready, compressible, and easily "put out," or stopped; it often precedes death, and is a sign of debility; it is observed in carditis and pericarditis, on the accession of the cold stage of intermittent fever, during the pain arising from biliary calculi, in primary or secondary affections of the stomach, in consequence of a blow on this organ, or of full doses of digitalis. This kind of pulse is felt in phrenitis (Dr. F. Home), in certain cases of amenorrhœa (Darwin), and in elephantiasis (Aretæus). Dr. Gregory said, it exists in persons of the lymphatic temperament.

Pulsus regularis, a regular pulse, is that in which all the pulsations are alike.

Pulsus irregularis, vel inequalis, an irregular or unequal pulse, is when the pulsations do not correspond to each other in frequency, quickness and force. There are various inequalities, viz. it is called *dicrotus, bisferiens, redoubled, bisiliens*, when two strokes follow each other rapidly, and are separated from the two succeeding by an interval of repose, and this is said to indicate the approach of hæmorrhage; *inciduus, incidens, incident*, when the second pulsation is weaker than the first, the third than the fourth, after which there is a stroke as strong as the first, and so on: the old writers held that this predicted critical perspiration and dissolution of disease (Nihell). Some persons have an irregular pulse in health, as was exemplified in the case of Addison, as attested by his biographer Tickell. Another pulse was termed *myurus*, when the second pulsation is weaker than the first, and several beats run into each other. This is also called a vermicular or fluttering pulse, is stopped by the slightest pressure, and indicates low fever and disease of the brain.

Pulsus intermittens, an intermittent pulse, exists when after one or more beats there occurs a cessation or repose. It was held a certain sign of approaching death by Galen, (*De Presag. et Pulsibus*), but is the ordinary one of some persons in health, becomes regular during disease, and on recovery assumes its habitual character. This was well illustrated in the case of a lady at Russell-square, whom I attended with my friend Mr. Hughes of Holborn. This kind of pulse may be caused by disease of the heart, hydrops pericardii, hydrothorax, hydrocephalus, compression or concussion of the brain, vermination, and other intestinal diseases. It was considered a fatal sign in the last stage of fever by Solano and Nihell, unless diarrhœa supervened, and it may be removed according to Prosper Alpinus when the urine becomes turbid. (*De Presag. Vitæ et Mortis*, lib. iv. c. 4.) Heberden, on the contrary, maintained that it might arise from trivial causes, and was not a bad sign, while Fordyce thought it a mortal symptom when it supervened on simple fever. Abernethy agreed with Heberden, and stated that his own pulse was intermittent and irregular under mental agitation, and dissented from all who considered this kind of pulse a dangerous symptom. However discrepant these opinions may appear, it is certain that an intermittent pulse is in general a dangerous symptom in the last stage of fever or other acute diseases, as it shews that the vital powers are very much diminished.

There are divers other species of pulses dependant on physical differences easily appreciable; some of which are described by Bordeu and Rucco. The former describes the following species, the irritative, nervous, convulsive, non-critical, compressed, frequent, quick, hard, sharp, and compressible.

The *critical pulse*, which is dilated, jerking, full, strong, frequent, and often unequal, he divided into the *superior* and *inferior*.

The *superior* is distinguished by a precipitate reduplication of the dilatations of the vessel with intervals of longer or shorter duration, announces evacuations from the organs situated above the diaphragm, and is divided into the *pectoral, guttural, and nasal*.

The *pectoral* predicts discharge from the chest, is soft, full, dilated, and equal, in which there is a slight undulation or oscillation.

The *guttural*, which announces secretions from the throat, is less full, soft, and frequent than the last.

The *nasal*, which indicates mucous excretions from the nose, is fuller and harder than the guttural; it is very strong, frequent, and bounding; it is that called *dicrotal*. Bordeu thinks that this does not always indicate epistaxis, and he is right; he says that this hæmorrhage takes place only when to the double pulse is added much quickness; when, on the contrary, there is less strength, it only announces a mucous excretion, and neither

one nor the other of these effects follow; delirium, stupor, erysipelas of the face, hæmorrhage from the ears, or ophthalmia occurs.

The *inferior pulse* announces evacuations by the organs below the diaphragm; there are unequal intervals between the pulsations, which render it intermittent. There is often a kind of undulation in the artery, it is never as well developed, as soft, or as equal as the superior pulse; so that it must not be confounded with the pulse of irritation; it is divided into *stomachic, intestinal, uterine, hepatic, hæmorrhoidal, renal, and cutaneous*.

The *stomachic pulse* announces or accompanies vomiting; it is the least developed of all the inferior pulses, and resembles most that of irritation; it is less unequal than the other inferior pulses, the artery appears to be rigid and tremulous under the finger, the pulsations are frequent, with tolerably equal intervals. Tension of the artery is, according to Solano, a certain sign of vomiting.

The *intestinal pulse* announces alvine dejections and diarrhœa; it is more developed than the last; after two or three tolerably equal and elevated pulsations, two or three succeed, which are less developed, and more rapid, whence result more or less regular undulation of the artery. This pulse is very irregular—it is never full and developed.

The *uterine pulse* indicates the approach of the catamenia, is also irregular, like the last, and is characterized by undulation of the artery, but the boundings are less constant, less frequent, or less marked than in the nasal, though tolerably evident; it is fuller and stronger than the intestinal, and not so intermittent.

The *hepatic pulse* is present in uterus; it is the most concentrated next to the stomachic; it is neither hard nor tense; two or three unequal pulsations succeed two or three normal; it is weaker and less sudden than the uterine—less lively and irregular than the intestinal; and it is never bounding unless complicated.

The *splenic pulse* is mentioned, but not described by Bordeu, who thinks that if the spleen acts as a reservoir for the blood, when filling or emptying itself, it must modify the pulse.

The *hæmorrhoidal pulsations* are unequal in strength and in interval; when less so, they appear to depend on a state of irritation; at intervals, nevertheless, some of the pulsations are less concentrated, and these are followed by the bounding pulse.

The *renal pulse*, which announces urinary evacuations, resembles the intestinal, inasmuch as it is equal, but to this there is added a degree of regularity, which the latter wants. The pulsations gradually cease, appearing to lose themselves under the finger, and as gradually re-appear, until they become more developed, and even rather bounding.

The *cutaneous pulse*, which indicates sweating, is full, soft, developed, strong.

All these pulses may be reciprocally confounded; that of irritation may even be complicated with the critical pulse.

The idea of Bordeu, that irritation of each organ, or the performance of their excretory function, would modify the pulse, is exceedingly ingenious, and although many of his distinctions are so subtle that the imagination can scarcely seize them, yet it must be acknowledged that the pulse furnishes very important indications, although less positive than he pretends. It is generally acknowledged, that a small, contracted pulse, indicates a nervous, irritable state; the undulating, that of approaching sweating; the decreasing, of approaching discharge of urine; the dicrotal, of epistaxis; and that a large, well-developed, free pulse is of good omen; this is but little, but it is still enough to draw attention to the exploration. The pulse and its modifications should be studied only in connexion with the other morbid phenomena, indicating either the affection of the organ primitively deranged, or of those secondarily affected. There is one point common to all diseases, the life of the patient is in great danger the more frequent and small the pulse is, or when it cannot be felt at the wrist, and is perceptible only at the bend of the arm, the carotids, or the heart; these signs are always the forerunners of inevitable death, but this also happens without so great a derangement of the pulse. Many of the distinctions of Bordeu are seldom observable in practice, as well as numerous others, which I have purposely omitted.

ACCOUNT

OF AN

EPIDEMIC SWEATING SICKNESS,

(SUETTE MILIAIRE,)

In the Department of L'Oise.

BY P. MENIERE, D.M.P.

ON the 9th of May information was transmitted to the government that an epidemic, not the cholera, was raging in the department above mentioned, and medical aid was required. The Dean of the Faculty of Medicine being forthwith apprized of this, he was desired to send medical men to investigate the nature of the disease, and to ascertain the basis of the treatment necessary. Drs. Pinel, Granchamp, Hourmann, and Menière, were instantly appointed by M. Orfila, and started the next day for Beauvais.

Having arrived at Beauvais, these physicians collected information as to the nature of the disease, from the medical men and

civil authorities of the town. It was the *suette miliaire*, or *suette Picarde*, which had previously ravaged those districts, and more especially in 1821.

It first shewed itself towards the latter end of April, but it became general only in May. No notice was at first taken of it, as it was considered an ancient endemic disease, and all minds were pre-occupied with the cholera.

The next day they set out for Nouailles, a village well situated, well built, and inhabited by persons in easy circumstances, had had at that time 84 sick, none of whom had died; the lowering of the temperature, which had been going on for some days, appearing to modify the disease, and no new cases had occurred. But while this disease was then disappearing, cholera was shewing itself, and seizing many persons just convalescent from the first. The symptoms are as follow:—

At Nouailles, as at Caucigny and Cyr-les-Mello, the disease appeared suddenly after a storm, during which the temperature was considerably raised. This was particularly noted in the epidemic of 1821. Under the influence of such a cause, it may happen that half the inhabitants of a village are attacked in one night. Women are more subject to it than men, and healthy, robust adults, than children and old persons.

The attack generally commences during the night. The sufferer awakes with headache, sweating, and dyspnœa. These three symptoms are almost constant, but may vary individually in intensity. The sweating is general, very abundant; skin hot, very red, and itching; pulse large, slow, and soft; tongue covered with a viscid mucus; no local pain. The dyspnœa appears to depend on congestion of the heart and lungs, the obstacle to respiration being in the organ itself, and not dependant on external causes; the plethoric state of the heart is indicated by the pulsations of the ventricles being diffused, large, and slow. The patient feels weight at the præcordia, and sometimes in the epigastric region; the pulsations of the celiac artery are very powerful, and raise the abdominal parietes, causing a pain similar to that of gastralgia. The headache, generally in the forehead or vertex, sometimes all over it, is a very severe, heavy pain, continuing without intermission, and not appearing to depend on congestion of the head. The sweating is really enormous; the patients have been obliged to change their linen twenty or thirty times in a night, and this for two or three days. Its smell appears analogous to that of a very dilute solution of a chloruret, or the egesta in cholera.

In common, that is uncomplicated, cases, the abdomen is soft, stools seldom and solid; urine scanty, not changed in its physical qualities.

In some patients this sweating may continue for four, five, or six days, and even more, though rarely, and then gradually

cease, without any *critical* phenomena, leaving merely a sensation of debility, in proportion to the losses sustained by the system. But in general, on the second or fourth day, a vesicular eruption appears on the chest, neck, wrists, back, and successively on the rest of the body. The eruption may take place again and again, and sometimes three crops may be on the patient at once. The size of the vesicles vary considerably; the fluid contained is at first limpid, then cloudy, and afterwards milky; it is partly re-absorbed, or effused by the rupture of the vesicle. The eruption ends in furfuraceous scales, which disappear without any trace on the skin. The duration of the eruption varies; it may terminate in five or six days, when convalescence immediately succeeds, so that the disease seldom lasts beyond a fortnight, and may end in eight or ten days.

When the eruption appears, the headache and sweating cease, but the dyspnœa continues, and often takes on a serious character; the congestion inducing pulmonary apoplexy and almost instantaneous death, or hæmoptysis. Another not less unpleasant complication, is cerebral congestion; some persons at Nouailles appeared to be convalescent, in whom the brain was so excited, that they could get no rest; in one only, a young robust postillion, did there appear any signs of delirium.

Convalescence is generally rapid, although the feeling of weight at the epigastrium, and debility may remain for some time after, but this is rare.

Such are the habitual symptoms of this epidemic, which has several times shewn itself in the departments of L'Oise and La Somme, and which has been clearly described by M. Rayer.

The general cause of an epidemic, although always remaining the same, may be considerably modified, and the results of its action will be consequently somewhat changed. The military sweating sickness of 1832 has taken on a new character, evidently owing to the presence of the cholera in the same districts; nay more, many persons who were attacked by it in 1821, and were speedily cured, have fallen a victim to it in a very short time.

The characteristic phenomena of this epidemic, are vomiting and diarrhœa, gastrointestinal symptoms dependant on the cholera, and replacing the cerebral and thoracic congestions of other years.

When these physicians arrived at Nouailles, there had been only one case of cholera, in the person of a poor woman, worn out with fatigue and privation; but many persons convalescent from the epidemic, were suffering from severe choleric diarrhœa, soon followed by aphonia, coldness of the surface, and other serious symptoms.

These symptoms occurred in persons in whom the military eruption had not shewn

itself, and death then soon took place. Several such cases were met with at Cauvigny, Château-Rouge, Boncourt, Olly-St. Georges, and Bury. Excessive diaphoresis suddenly replaced by immoderate diarrhoea, antagonist functions succeeding each other beyond the intervention of therapeutic agents capable of producing such a result, is undoubtedly a morbid phenomenon of the most intense interest. Oppression and headache were seldom met with, but the pulsations of the cæliac artery were very much increased, and added to the pain suffered by choleric patients.

Having made these observations at Nouailles they proceeded to Cauvigny, an apparently healthy place, containing 1,025 inhabitants, in easy circumstances. By the 15th of May there were 196 sick, and 21 deaths, the greater part of them dying either of cholera or the epidemic complicated by that disease; 8 or 9 however fell victims to pulmonary congestion, and that in the short space of a few hours; no autopsy could be obtained, in consequence of the prejudices against dissection.

At Nouailles the predominant symptom was cerebral, at Cauvigny pulmonary congestion; and yet these villages are only two leagues distant, are equally well situated, and there is nothing in their topography which can account for such a difference.

(To be continued.)

Reviews.

The Edinburgh Medical and Surgical Journal. July.—(concluded.)

ART. VIII.—*Case of Secondary Hæmorrhage after Amputation, in which the Femoral Artery was tied in the upper third of the Thigh.* By JOSIAH ALLSOP, M.D.

IN this case a man, ætat. 44, had the outside of the leg laid open for two-thirds of the length of the fibula, this bone being denuded and broken into many fragments. The narrator and Mr. Adams agreed that amputation was necessary, and it was performed by a double flap at the inferior third of the thigh. The man was insensible before and after the operation; the stump went on badly, the muscles separated from the bone at its extremity, but union took place superiorly. On the fourth day a slight hæmorrhage took place; it recurred profusely on the sixth; it was arrest-

ed by compression of the femoral artery at the groin, and the formation of a firm coagulum. After this improvement, granulations appeared.

The ligatures came away on the thirteenth day, and cicatrization had commenced on the edges of the skin on the twenty-fifth, a small cavity at the end of the stump remaining. The compress was applied too lightly at this time, it produced uneasiness, and a profuse arterial hæmorrhage followed, which was restrained by pressure on the artery against the ramus of the pubis. The femoral artery was tied where it lies under the inner edge of the sartorius muscle. The hæmorrhage was permanently arrested, and cicatrization rapidly advanced, but was impeded by the exfoliation of a piece of bone. The reason the artery was tied so high up was, because Dr. Allsop considered it dangerous to disturb the muscles on the face of the stump, which had but feebly united, and also because it was probable that a ligature applied to the lower part of the artery might induce ulceration. The patient did well.

The practice pursued in this case showed the operator to be a surgeon of skill and judgment.

ART. IX.—*On the Cure of Amenorrhœa by Leeches applied to the Mammæ.* By C. LOUDON, M.D.

Dr. L. has applied two leeches to the lower part of the mammæ on alternate days for a month, as a means of exciting the capillaries in these organs, and by sympathy in the uterine. This patient was a lady who had suffered from amenorrhœa for two years. In three weeks the breasts were swelled to an enormous size, causing a sensation as if they would burst.

Menstruation came on at the end of the month, though no medicine, except a mild aperient, was employed, and the lady is now the mother of two children. This practice is only recommended as an auxiliary to the usual method.

ART. X.—*On some Diseases of the Throat, which affect the Organs of Voice, particularly in singers, actors, orators, and others, who speak in public.* By FRANCIS BENNATI, M.D. of Vienna, Padua, Pavia, &c.

This essay was read before the Academy of Sciences, and contains an account of the author's opinions on the causes and treatment of enlarged tonsils, the difficulty of motion of the muscles which compose the isthmus faucium, and the organic prolongation of the uvula.

Enlargement of the Tonsils.—The usual plan of treatment is employed with a gargle composed of four grains of pure iodine to a pound of water. Iodine is given internally, and an astringent aluminous lotion is alternated with the medicine. If inequity of the tonsil remains, nitrate of silver is applied.

Atony of the muscles which compose the isthmus faucium.—This may arise from derangement of the digestive organs, and will be removed by quinine or cinchonine, aided by sea bathing. If the disease depend upon the nerves which are distributed to the muscles near the summit of the windpipe, that is to say from muscular relaxation, aluminous gargles, or insufflation, will effect a cure. In some cases *douches* or *moxas* will be necessary. The insufflation of alum powder, above all, produces the best effects. The author restored the voice of a person who for six months could only speak in whispers.

Prolongation of the uvula.—The author prefers caustic to excision, and has invented an instrument for its application, which he calls *staphylopyrophorus*, or double caustic bearer, and is a very complicated apparatus. We have heard of a case in which Mr. A. C. Hutchinson excised a portion of the uvula, and cured a young lady of a cough, which defied all other remedies.

We confess our scepticism when M. B. declares the cicatrization ef-

fected by his instrument, causes neither pain, nor nausea, nor any inconvenience. He relates the case of an advocate of the *Cour Royale*, in which the voice was lost after a quarter of an hour's speaking, but was cured by caustic. In obstinate cases of hoarseness the alum powder or gargle deserves a trial.

ART. XI.—*Notes and Observations upon the Contagion of Typhus Fever and Contagion generally.* By WILLIAM FERGUSON, M.D. F.R.S.E. Inspector General of Military Hospitals.

This is an elaborate essay occupying twenty pages of our contemporary, and is replete with much instructive matter. Want of space prevents us from attempting an analysis at present, but we may revert to it at some future period. It is extremely creditable to the author. Such are the original papers in our esteemed contemporary. It is pleasing to observe the truly scientific course pursued by our colleague, while low vulgarity and Billingsgate scurrility are left to our weekly rivals.

An Essay on the Epidemic Cholera; being an inquiry into its new, or contagious character; including remarks on the treatment; as likewise, tables of the average rate of disease and mortality, recently occurring in London. By JOHN WEBSTER, M.D. Member of the Royal College of Physicians, London; Physician to St. George's and St. James's Dispensary; Lecturer on Materia Medica and Pharmacy, &c. London; Burgess and Hill. 1832. pp. 220.

CHOLERA appears to be an inexhaustible subject; notwithstanding the immense number of books already published on it in this and other countries, more are issuing daily from the press, and yet we cannot say that the subject is better understood now than it was 10 years since, and this, probably, because attention is rather di-

rected to ascertain whether or not it is contagious, rather than to discover its cause and curative indications; not but that many physicians have directed their attention to those points, but they have been made altogether a secondary consideration.

We do not intend to blame the profession for devoting their attention to the question of contagion, inasmuch as it is a point of especial importance, but we do consider that the therapeutic indications have not been sufficiently examined, and, even at this the eleventh hour, we would urge their investigation.

The opinion of Dr. Webster in regard to contagion will be seen by our reports of the Westminster Medical Society, for the past winter. He extends his inquiries considerably in the present production, and brings forward the descriptions of cholera by the ancient authors, to prove that it is not a new disease. His work is characterized by considerable research, judgment and originality; his opinions are entitled to respect, as he is indefatigable, and impartial in his examination of the question. We have been highly pleased with the book, which we recommend to all desirous of obtaining a good account of the disease. It is among the best we have seen.

A Lecture Introductory to a Course on Midwifery, and Diseases of Females and Children, delivered at the Anglesey Lying-in Hospital. By G. T. HAYDEN, M.R.C.S.I. Surgeon to the Anglesey Lying-in Hospital, &c. Fannin and Co. Dublin. 1832.

THIS is a tolerably creditable essay, although there are some parts which would be as well placed in the prospectus of the Anglesey Hospital, as in this lecture; and again, one or two paragraphs, which do not breathe a liberal spirit in our opinion.

Observations on the Treatment of various Diseases. By ROBERT J. GRAVES, M.D. M.R.I.A. King's Professor of the Institutes of Medicine.

" HABITUAL CONSTIPATION.

"IN many chronic diseases, and in habitual constipation, it is of the greatest consequence to procure daily and regular discharges from the bowels. *Lavements* effect this purpose most conveniently, and possess the advantage of not interfering with or weakening the digestive functions of the stomach and upper portion of the alimentary canal. Many persons, however, particularly females, have an insuperable objection to this method of obtaining relief, and acquire the habit of taking aperient medicines whenever their bowels are confined.

"Various causes have combined to render blue pill and calomel almost popular remedies, to which many have recourse when their bowels are irregular, or the stomach out of order. Indeed, it is quite incredible what a number of persons are in the habit of taking these preparations, either by themselves or combined with other purgatives, whenever, to use the common expression, they feel themselves bilious. This habit sooner or later induces a state of extreme nervous irritability, and the invalid finally becomes a confirmed and unhappy hypochondriac; he is, in fact, slowly poisoned, without the more obvious symptoms of mercurialization being at any time produced.

"It is almost unnecessary to observe, that although saline aperients give temporary relief, they afterwards increase the tendency to constipation, and weaken the stomach. The class of purgatives least liable to objection consists of magnesia, aloes, rhubarb, colocynth, &c., for exhibiting which many well known and excellent formulæ are used. But even these substances, whose debilitating effects on the stomach are not near so great as that of mercurials and salts, are attended with the disadvantage of being

required in larger doses in proportion as the bowels become accustomed to their action. To remedy this evil, Dr. Elliotson has suggested a valuable combination, consisting of compound extract of colocynth with minute doses of croton oil. This I have frequently given with the best effects; but it is liable to a serious objection, for unless the croton oil be perfectly mixed with the mass, some of the pills may be too powerful, while the others are comparatively inert, and consequently the patient is exposed to the danger of hypercatharsis, as I have twice witnessed, although in both cases the medicine had been prepared in the shop of a respectable apothecary. The following combination will, in general, serve to obviate costiveness, without diminishing the appetite, or being attended with the necessity of the dose being increased as the patient becomes accustomed to its use:—

R *Electuarii sennæ* ℥ii.
Pulv. supertart. potassæ ℥ss.
Carbonatis ferri ℥ii.
Syrupi zingiberis q. s.
Ft. Electuarium.

For the first few days I generally add about two drachms of sulphur to this electuary; but as soon as its operation has been established, the quantity of sulphur may be diminished one half, and at the end of a week it may be omitted altogether. The dose must be regulated by its effects, but in general a small teaspoonful in the middle of the day and at bed-time will be sufficient.

“The value of the carbonate of iron as a tonic aperient has not been duly appreciated; I have succeeded in curing, with it alone, a practitioner of eminence in this city, who had been long subject to extreme constipation, and had been reduced to the necessity of taking an enormous dose of purgatives almost every week.

“When injections carefully administered with Read’s syringe fail to remove obstinate constipation, which they will sometimes, though rarely do, other means must be resorted to.

Some practitioners are in the habit of giving one dose of active purgatives after another, adding to the strength of each dose in proportion to the obstinacy of the case. This is an imprudent and hazardous mode of proceeding. In such cases, the stomach will generally be capable of retaining castor oil; and I prefer giving repeated doses of this medicine to any other when the bowels display such an unusual degree of obstinacy, in as much as it may be safely accumulated in the alimentary canal, and will in the end procure evacuations without any of the dangers which attend repeated doses of acrid and drastic substances. I generally commence with two ounces, to be repeated every second hour, until the desired effect is produced. I do not recollect who it was first made the important observation, that in obstinate constipation the first dose of castor oil must be large, but when this has acted on the bowels, the dose may be gradually diminished, provided that the medicine is continued every day for some time. I have verified this in private practice, and lately had a patient in the Meath Hospital whose bowels had resisted injections and the strongest cathartics. Three ounces of castor oil continued for two days in succession, two ounces on the next day, and one ounce on the fourth, were found quite effectual. In some, the daily dose may be thus gradually diminished to a tea-spoonful at bed-time.

“When the tendency to constipation is habitual, and the patient is not effectually relieved by the daily use of injections, and when the peculiar circumstances of the complaint render the administration of aperient medicines by the mouth inadmissible, great advantage may be derived from the application of purgative liniments to the abdomen. The one I have found most useful consists of four parts of castor oil and one part of tincture of jalap. This must be diligently rubbed into the region of the stomach every morning before the patient rises, and it must be done

under the bed-clothes, least the unpleasant odour should sicken the stomach. I am indebted to a medical friend for this suggestion, which I used with success in the case of a young gentleman, whose state had become almost hopeless.

"In constipated habits, I have likewise occasionally derived very remarkable benefit from the use of nitric acid given in sufficient doses. It seems, like the carbonate of iron, to possess the advantage of combining tonic with aperient qualities.

"In connexion with this subject, I may remark, that long continued and repeated attacks of constipation, by enlarging the cæcum and colon, lay the foundation of other diseases. This happens most frequently in females, but is not uncommon among males. In such cases the enlargement of the guts may occasion either of two distinct forms of disease, both attributable to the retention and accumulation of hardened fæces. In one form the symptoms are calculated to mislead the medical attendant, by inducing him to believe that his patient is labouring under chronic hepatitis. Pain and tenderness, and in some, hardness, or even a degree of enlargement, are perceptible in the right hypochondrium, while the patient's aspect is bilious, and he not unfrequently complains of pains in the right shoulder. At times he is subject to violent fits of colic, or to what he compares to cramp in the stomach, particularly after the bowels have been confined, after eating vegetables calculated to generate flatulence, or after exposure to cold.

"In the other form, the general health suffers less; the pain and other local symptoms referred to the right hypochondrium are not complained of, but the patient is occasionally subject, particularly on exposure to the action of the causes before enumerated, to violent attacks of vomiting and pain in the belly, which are accompanied by the characteristic symptoms of intestinal obstruction. The circumstance that the immediate

attack was apparently induced by some palpable and known cause, such as an error in diet, or exposure to cold, may here deceive the practitioner, and cause him to overlook the fecal accumulation, without whose removal recovery cannot take place. I and two other practitioners were several times deceived in the case of a gentleman, of a robust constitution and great strength of body; and the true cause of the sudden and dangerous colics to which he was subject, was not discovered until he happened to mention, that when a young man, he seldom went to stool more than once a week. This led to the suspicion of an enlarged colon, and ever since the attacks have readily yielded to large injections administered by means of a Read's syringe, without which instrument he now never ventures to travel. The practical point that strictly claims our attention is, that the period of life at which the patient becomes subject to these attacks, is often long subsequent to the cessation or diminution of the habit of constipation, and consequently the physician will not perceive the true cause of the complaint unless he questions the patient very accurately."

"MELÆNA IN FEVER.

"It has been satisfactorily proved by modern investigations, that the dark-coloured matter similar in appearance to coffee-grounds which is discharged from the bowels in this disease and yellow fever, consists of the coagulum of blood broken down and darkened in tint by the acids of the intestinal canal. I had lately an opportunity of observing a fact strikingly corroborative of this explanation. A young gentleman laboured under very severe fever, with violent headache, and was attended by the Surgeon-General and me. On the seventh day of his illness, two leeches were applied to the internal surface of his nostrils, and produced a very copious flow of blood, large quantities of which were swallowed by the patient during his sleep. In thirty-six

hours after the bleeding had ceased, the nurse-tender became very much alarmed on observing the blackness of the alvine discharges. She told the family that it was a very dangerous symptom, and I was sent for in great haste. I need scarcely add, that on seeing the evacuation of so large a quantity of matter resembling coffee-grounds, the true explanation of the occurrence immediately suggested itself, and enabled me to dispel the alarm of my patient's parents.

"When blood is swallowed by a person in health, whose digestive organs are vigorous, it never forms any thing like coffee-grounds in the large intestines, but is thoroughly digested and absorbed in the superior portion of the alimentary canal."—*Dublin Journal of Medical and Chemical Science*.

HINTS ON VACCINATION.

DR. SYLVANUS FANSHER of Southbury, Connecticut, in the United States, recommends the following plan to expedite the constitutional action of the vaccine virus, when the patient is exposed to the viriolum contagion.

"Whenever persons presented for vaccination whom we thought had been five or six days exposed to small-pox, we vaccinated by numerous punctures on the body and limbs; and we found that, by making broad punctures, a hasty vesicle was induced, and an earlier effect on the system. Forty-two hours is to be gained by this practice, as the results of twenty years' experiments show. Yet we believe that half a dozen pustules are as effectual in accelerating vaccination as more; for if one should take the lead, and be more forward than the others, it will govern all the rest; and we suppose that all the advantage to be derived from multiplying them, is merely to increase the chance for a forward pustule. Our practice of expediting vaccination, latterly, has been, to make about *three broad punctures on each arm, three on each side of the body, viz.*

half way between the breast and shoulder, and insert the vaccine virus therein very copiously, and have generally found the result salutary. But when, through the timidity of the patient, scarcity of virus, or any other cause, we have been prevented from vaccinating as we wished, an adverse result has been the consequence, and the small-pox has triumphed as we had predicted; the vaccine incision, in that case, has dwindled, and resembled secondary vaccination. This method has already afforded relief in about forty hopeless cases. We beg leave to state one of the last experiments as a specimen.

"Trumbull, Fairfield county, Connecticut.—In 1830, a young lady caught the small-pox, had it badly, and the pustules began to suppurate before its character was known. Her grandmother, another woman, and a boy, had been exposed about a *week*, and were vaccinated on the body as above, and *each of these had an early-formed pustule, and had the symptoms about forty hours sooner than others vaccinated at the same time.* We considered these real forlorn-hope cases. No symptoms of small-pox appeared."—*Twenty-fourth Annual Report of the London Vaccine Institution*.

Efficacy of Antimonial Ointment in Chronic Rheumatism.

By I. T. BLENKIN Esq. M.R.C.S.
Burton Crescent.

JULY, 5th. Thomas Roberts, æt 40, blacksmith, of athletic proportions, but much emaciated, of pallid complexion and anxious expression of countenance, states that he is labouring under severe pains in the loins and shoulders, and stiffness in the knees. The pains are increased at night, and incapacitate him from the most ordinary exertion. Pulse natural; appetite good; bowels regular; ill since Christmas. Thinks the attack originated in exposure to damp when heated by his occupation. Became

a patient at the Pantion-square Dispensary, and afterwards at the Middlesex Hospital, where the treatment has consisted of courses of mercurials and sarsaparilla, since changed for colchicum, which he is now taking—

Omittantur medicamenta; infricetur unguentum antimoni tartarizati omni nocte.

July 11th. His appearance is much improved, from the regular sleep he has enjoyed for the last few nights. Says he has not tied his shoes for six months, or raised himself from his chair, without first resting upon his arms until this morning, when he did both with great ease. He has no pain in the loins, a little only in the left shoulder, and to use his own expression, his knees feel as if freshly oiled. The ointment has been regularly used, and what is remarkable, the number of pustules is by no means proportionate to the efficacy of the remedy in alleviating the stiffness and pain.

Counter-irritation had not been tried in any other form, the general character of the pains precluding the application of blisters.

The Anatomy of the Thymus Gland.

By Sir ASTLEY COOPER, Bart. Sergeant-Surgeon to the King, Consulting Surgeon to Guy's Hospital, &c. &c. 4to. pp. 47. Five Lithographic Plates. London. 1832. Longman and Co.

THERE never was a member of the medical profession in this country, who has obtained so much popularity as Sir Astley Cooper, nor one who so justly deserved it. He attained the zenith of celebrity by fair, honourable and legitimate means, while he left others to pursue the tortuous and ignoble stratagems which excite or catch the public, and insure a certain degree of reputation. It would be invidious to illustrate this point; it is too manifest to require attestation. It is highly gratifying to reflect on the career of "the first surgeon in the world," as Baron Dupuy-

tren so justly designated our illustrious countryman. Few have contributed so largely to science as Sir Astley Cooper. His various works need no eulogy from us; they are universally esteemed on account of their transcendent merits. His lectures on surgery have not been equalled, and are decidedly the best hitherto published. There is no student or practitioner, of whatever standing, should be without them. We particularize this work because it can be easily procured by our junior friends, while it contains the pith of Sir Astley's opinions.

The present work adds much to the reputation of the author. It offers an example well worthy of imitation, by shewing the zeal and love for science entertained by one who has arrived at the highest fame, and whose object is solely to benefit humanity and medicine. The following extracts contain the views of Sir Astley on the thymus gland:—

Thymus Gland in the Human Subject.

"This Gland is formed of a thoracic and a cervical portion on each side. The former is situated in the anterior mediastinum, and the latter is placed in the neck just above the first bone of the sternum and behind the sterno hyoidei and sterno thyroidei muscles.

Between two and three months of foetal life, as will be seen in the plate, it is so small as to be but just perceptible.

At three months its increase is in proportion to the relative magnitude of the foetus, and thus it continues to grow gradually and equally to the seventh month, when it enlarges out of proportion to its former growth.

At eight months it is large, but at the ninth month has undergone a sudden change, becomes of great size, and is said to weigh half an ounce, from which circumstance, however, on account of the cavities which it contains and the varieties to which it is subject, no judgment of its bulk can be formed.

It increases after birth, and continues large to the first year, when it slowly disappears to the time of puberty; and in after age it ceases to have cavities, and becomes a body of very small dimensions." 19.

Sometimes a third thoracic lobe exists joining the other two, yet admitting of their separation under a careful dissection. Sir A. has seen the vena innominata pass through the gland, and he has seen it placed anteriorly to the cervical lobes. Its form is subject to considerable variation; the left gland is often larger than the right.

After giving a clear and accurate account of the relative situation of the gland, and of the fascia of the thorax, that fascia which may be said to form the roof of the thoracic cavity, as the diaphragm constitutes its floor, our author proceeds to the composition of the thymus.

It is formed of two distinct bodies, which may properly be called a right and left thymus gland. It is connected to the surrounding parts by an envelope of coarse cellular membrane, fixing it and uniting its two portions.

"When this membranous covering is removed, the substance of the gland is exposed, which is found to be of the conglomerate kind, being formed of numerous lobes which are connected together by a second covering of reticular tissue uniting the lobes to each other, and combining its parts by entering minutely into its interstices.

The lobes of this gland differ in magnitude, but not one of them appears to be larger than a pea, and they vary from that of the head of a pin to the size above-mentioned. When the form of the thymus is strictly investigated, the lobes are found to be disposed in a serpentine direction around a cavity hereafter to be described.

The gland may be unravelled, and it will be discovered to be composed of a rope on each side, of which the right and left thymus is constituted, and on each of these the large lobes

form knots, and it appears like a necklace of beads, but even these lobes may be still further separated.

In order to succeed in unravelling the gland, it is necessary to divide the arteries, veins, as well as a mucous membrane, to be described hereafter, as the arteries, veins, and membrane unite the lobes to each other to give them a serpentine course, to shorten the gland, and to lessen the space which it would otherwise occupy.

These ropes are disposed in a spiral course around a central, or nearly central, cavity, and this disposition of them is preserved by the arteries, veins, and mucous membrane, by the division of which the ropes are unravelled.

The spiral rope which constitutes the gland on the right side has no communication with that on the left, although the two glands are combined into one by cellular tissue, yet in its usual formation the glandular structure continues entirely separate.

In order to distinctly observe the rope, and to unravel it satisfactorily, it is necessary to dissect it, in part, in water, and then harden it in alcohol, when the dissection may be minutely pursued, and the lobes and their communicating portions be preserved and readily demonstrated.

This rope, or chain of gland, is composed of lobes of different sizes, connected together by membrane and by smaller portions of gland which surround a large internal cavity.

To proceed with the investigation of the structure of this gland, remove a very thin superficial slice of each lobe, or of several of these, and numerous little cavities will be seen which may be set open after the organ has been hardened in spirits of wine, and these are the secretory cavities or cells producing the fluid which issues so abundantly.

The lobes being further examined, beside their cells, are found to contain a small pouch at their bases, which leads into a reservoir, so that the secretion which escapes from the lobes finds a ready entrance into the

cavity of the gland, from which it may be absorbed.

If a pipe be introduced into the gland, and alcohol be injected, and the organ immersed in strong spirits, or a solution of alum, a large cavity will be filled, which I shall call the reservoir of the thymus.

This reservoir forms a general communication between the different lobes; it begins from the inferior part of the thoracic portion, and extends from thence into the extremity of the cervical.

The reservoir does not maintain a straight course, but passes spirally, or in a serpentine direction, through the thoracic part of the gland, and is somewhat more direct in the cervical portion.

With regard to its size, it varies in different places, but generally is the largest near the centre of the thoracic, and it is least at the communication of the cervical with the thoracic part of the gland.

In the cervical portion it increases, but is less than in the thoracic, yet it still may be distinctly traced.

When opened, after having been injected and hardened, its internal surface appears to be lined by a smooth membrane; but if it be at once dissected in water, this lining membrane is found to be of the mucous kind, for it is rather villous than smooth, and instead of having a few red vessels, when filled with a vermilion injection, it is found to be highly vascular, and the arteries which are distributed to it may be seen meandering upon its surface and minutely dividing, so as to redden every part of it.

Its interior forms ridges, which are produced by small ligamentous bands, which cross the surface of the reservoir in various directions, and encircle the mouth of the pouches; these bands are formed for the purpose of keeping the lobes together, of preventing an injurious yielding of the parietes of the cavity, and to give strength to resist too great an accumulation of the secretion.

When the reservoir is floated in water, a number of small openings appear upon its internal surface, and if a probe be introduced into these, it passes into the pouch at the roots of the lobes, so that by these apertures the secreted fluid escapes into the reservoir.

These orifices are not so numerous as the lobes themselves, the reason for which is, that each pouch communicates with more than one lobe.

The boundaries, or walls of the gland, are full of secretory cavities or cells, which are extremely minute; they communicate with each other and open into the pouch of the lobes, and from the pouch into the reservoir." 30.

Physiology of the Thymus Gland.

It is more than probable that this gland performs an office of some consequence in the foetus. Hewson thought that it formed the internal part of the red globules of the blood, and that it was an appendage to the lymphatic glands, to which he considered it similar in structure and use. The former idea is pure fancy; the latter is demonstrably not the fact. Let us look at the secretion of the gland.

"It has been already stated, that this gland secretes a great abundance of white fluid; that it is situated between the veins in which the great absorbent ducts of the body terminate; that to each cornu is attached a large absorbent duct in the foetal calf, capable of being filled with coarse injection, and that this vessel terminates at the junction of the jugular veins in the vena innominata.

This fluid, although constantly found in the human foetus, having the appearance of chyle, viz. white like cream, but with a small admixture of red globules, is not easily procured in sufficient quantity to make it the subject of chemical analysis; but from foetal calves, two or three ounces may be without difficulty collected, and an abundant opportunity afforded of ascertaining its composition.

The best mode of obtaining it is, by cutting the gland into very small pieces, and placing them upon gauze, which being squeezed, the solid is separated from the fluid part, and the latter escapes through the gauze.

The thymus should be previously immersed in water, to deprive it of its blood.

The fluid thus collected from the calf, has the appearance of cream slightly tinged with blood, and to the eye has the character of chyle.

Warm water dissolves a large portion of it.

Heat readily coagulates it.

Alcohol coagulates it.

Sulphuric acid not only coagulates, but chars it.

Nitric acid coagulates it firmly, first turning it white and then yellow.

Nitric acid diluted, precipitates a white solid from its solution in water, giving it the appearance of milk.

Muriatic acid coagulates it firmly and turns it white.

Liquor potassæ converts it into a muco-albuminous matter, which falls, in long extended threads, like the saliva in ranula, and gives it much the appearance of white of egg." 39.

Disease of the Gland.

I was requested to visit a young person 19 years of age, who suffered under so severe a dyspnœa that it was with great difficulty she could remain recumbent for a few minutes, and if a short period of repose was obtained, she started up with a sense of suffocation, and for several seconds struggled violently for breath.

Upon enquiring into the cause of her suffering, I found a swelling which occupied the inferior part of the neck at the upper opening of the thorax, which projected above the clavicle upon each side, and as I supposed arose from an enlargement of the absorbent glands at the termination of the jugular and subclavian veins.

The swelling had existed for many years, but of late suddenly increased. I ordered leeches to be applied, her

bowels to be opened, and on the following day she was somewhat better, but another day brought with it not only her former, but still more aggravated sufferings: I then advised a blister to the upper part of the sternum and to the swelling in the neck, desired the cuticle to be removed, the part to be dressed with the unguentum hydrargyri, and directed her to take calomel and opium, which she accomplished without much difficulty, as her deglutition was less affected than her breathing.

The means which I recommended gave her only slight temporary relief, and she became daily weaker, her legs were œdematous and she was unable to get any rest, but in the sitting posture, and then only with her head inclined forwards, and supported in that position by her sisters; for the moment it fell back, the pressure of the tumour on the trachea and the dyspnœa were suddenly increased.

I witnessed her making daily approaches to dissolution, without being able to afford her any permanent benefit; she died after a fortnight, not from any sudden attack of suffocation, but from being worn out by the constant irritation excited by the difficulty in respiration.

I obtained permission to examine the body, and found the disease was situated in the thymus gland; the swelling reached from the curvature of the aorta to the lower part of the thyroid gland, and the latter was also considerably enlarged.

The thymus appeared of a yellowish white colour, and was divided into several large lobes.

The trachea was involved in the tumour, and its sides were compressed by it, so that its transverse diameter was somewhat diminished. The arteria innominata was placed behind it, and the left subclavian, and left carotid arteries to its left side; it surrounded the vena innominata, and upon cutting into the vein, the diseased gland was found projecting into its cavity, and upon making an incision into the swelling, the reticular

texture of the gland was found to be filled by a white pulpy substance.

In this case, the complaint was compounded of a diseased growth of the thymus and of bronchocele, or an unnatural growth of the thyroid gland. The latter is so placed that its enlargement little endangers suffocation, because the surrounding parts can yield to the pressure of the swollen gland; but as the thymus is situated in the thoracic opening, in its enlarged state, it soon reaches the sternum and first rib, by which it is bound, and therefore, its increase is towards the trachea, which becomes enveloped by it, and its function interrupted in consequence of its compression.

The disease appeared to be of the Fungoid kind." 47.

THE

London Medical & Surgical Journal.

Saturday, July 21, 1832.

MEDICAL EVIDENCE.

THE trials of Kinnear and Bagster afford good illustrations of the discrepancy of medical evidence, and clearly demonstrate the necessity of enforcing the study of medical jurisprudence. In the first case, we find men of considerable reputation arriving at the conclusion that a gentleman lost his life by poison, though there was not a shade of proof of the idea. It would be a most dangerous principle in criminal proceedings, if the mere assertion or belief of a medical man that death was caused by poisoning, would be evidence against the accused. We hope the time will never arrive when a prisoner will be convicted and executed upon such

evidence as this, and we are satisfied that no judge would receive it on a criminal trial. Even in a civil case, no jury, unless composed of fools or knaves, could be influenced by it; and we are astonished that any of our hospital surgeons could deliberately swear that death was caused by poison, without a single circumstance, moral or physical, to warrant such a conclusion.

Medical practitioners have ever been famed for the discrepancy of their opinions, but this has been so remarkable of late that the public must form a most contemptible opinion of medicine and its practitioners. Hence the just and severe criticism of the public press upon the faculty. Let any sensible man peruse the medical evidence in the case of Miss Bagster, and he must blush for the medical profession. Let him reflect on the indelicate and absurd questions put to the unfortunate lady—the former totally unnecessary, the latter calculated to puzzle nine-tenths of the community. We shall not prosecute this theme; we are grieved that our profession stultify themselves so egregiously.

ATTEMPT AT INFANTICIDE.

IN our 19th Number we gave an account of a case, in which a new-born infant was precipitated thirteen feet in depth into a privy, and escaped unhurt. We stated that the law did not reach the case. The mother has been tried at the Old Bailey, and acquitted. She did not conceal her

pregnancy; there were no bruises on the infant; and Mr. Snitch, the surgeon, admitted, on his cross-examination, that the woman might have been delivered without her knowledge.

REPORT ON THE FORT PITT
MUSEUM AND COLLECTIONS.

Thatched House Tavern,
16th May, 1832.

At the seventeenth annual meeting of the medical officers of the army, an account of the present state of their library, museum of natural history, museum of anatomy, and of the records, was laid before them by the chairman and secretary.

During the last year, it appears that the additions made to the museum of natural history have been very considerable; many of them splendid, and several of great value. The skeleton of the crocodile is perhaps the most perfect and splendid in any collection in the world; it is the gift of Mr. Sandham, of the 11th dragoons.

In the mammalia, 10 specimens have been added, making a total of

Birds,	349	.....	661
Reptiles,	120	.....	352
Fishes,	28	.....	55
Testacea,	2	.....	56
Insects,	392	.....	1540
Zoophytes,	2	.....	8

Total, 903 2718

In the vegetable kingdom, 4177 specimens have been added, making a total of 4520 in our collection in botany.

In the mineral kingdom, 481 specimens have been added, making a total of 2599 specimens in our mineralogical collection.

Not less valuable have been the additions made to our anatomical museum.

Natural human anatomy—

62 preparations have been added, making a total of	....	417
Morbid anatomy, 158	....	1249
Comparative, 236	....	360

Total, 456 2026

Drawings,	6	....	108
Paintings,	0	....	19
Casts,	7	....	46
Specimens in the rude state,	93	....	93
	106		266

The principal contributors to the museum have been Major-General Sir Lewis Grant; Dr. Burke, inspector-general of hospitals; Dr. Davy, assistant inspector of hospitals; Dr. Roe, 7th dragoon guards; Dr. Farquhar M'Crea; Dr. M'Andrew, 14th regiment; Mr. Leslie, 45th; Mr. Dartnell, 41st; Dr. Sandham, 11th dragoons; Mr. Ford, 72nd; Mr. Bacon, Hon. East India Company's service; Captain Squire, 13th dragoons; Dr. Portelli; Mr. Smith, assistant staff-surgeon, Cape of Good Hope; Surgeon Thomas, ordnance; Dr. Baxter; Dr. Strahan; Mr. Burton; Mr. Jemmett; Dr. Alexander; Mr. Armstrong; Mr. Stevenson, 89th; Sir James M'Grigor; Dr. Mouat; Dr. Henderson, 48th; Mr. Fiddes, 85th, &c. &c.

Valuable as both the collections are in the opinions of natural historians and anatomists, there are still blanks in each, which it is most desirable should be filled up as soon as possible, and which it is hoped will be filled up by the liberality of members or of their friends.

DESIDERATA IN THE MUSEUM, FORT
PITT, CHATHAM.

Natural History Branch.

The crania of animals.

The collection of foreign birds contains but few specimens from South America, and the Windward and

Leeward Islands, and is entirely destitute of any from Jamaica, and from Ceylon.

Among the reptilia, there scarcely are any turtles, or foreign toads. The fine collection of lizards may be further enriched from foreign stations, particularly from Jamaica and Ceylon (from which there are no specimens,) and also from the Mediterranean.

The museum contains few fishes.

There is a general deficiency of the invertebral classes.

Specimens in conchology, and the various genera of crabs, would prove a valuable addition.

Drawings of specimens in any branch of natural history, as well as of plants, would be a great acquisition.

Pathological and Anatomical Branch.

Injuries and malformations of the bones.

Diseased structure of the brain and membranes.

Malformations of the heart.

Aneurisms of the small arteries.

Herniæ of all descriptions.

Tumours of all classes.

Scirrhus and cancer.

Urinary calculi.

Diseases of the male organs of generation.

Ditto of the female organs, and particularly of the uterus.

Diseased parts from children.

The foetus at different periods.

Malformations of the foetus.

Casts, drawings, and paintings, in natural and in healthy anatomy.

It is well known, that for the library there are no established or regular funds, and that for its support it is entirely dependent on the liberality of the officers of the department, and an appeal to them has not been made in vain; for, during the last year, the library committee have been enabled to purchase some valuable works of reference, to bind most of the works, and to fit up the library.

During the past year, 140 volumes and 40 pamphlets have been added to the library, making a total of 1934 volumes, besides pamphlets.

The following donations in money have been received during the year:

FROM	£.	s.
Dr. Donald M'Leod, deputy inspector-general	*20	0
Dr. Burke, inspector-general	†10	10
Dr. J. Macgregor Malloch, surgeon 46th	†10	0
Dr. Murray, deputy inspector-general	\$3	3
Dr. Kenny, surgeon 12th lancers (3rd donation) . .	2	0
Dr. Divir, surgeon 91st regiment (2nd donation) . . .	1	1
Assistant surgeon Cavet, 97th regiment (2nd donation) . .	1	1
G. M'Dermott, Esq. surgeon to the forces	1	0
The Rev. George Clark, military asylum	5	5
	£54	0

There remains a balance of about 6l., which has been appropriated for the further purchase of standard professional works.

The following works will be highly acceptable, being much wanted to complete those in the library, viz. the first five volumes, and the 9th, 10th, and 11th volumes of the Asiatic Researches, quarto, Calcutta edition. The first 11 volumes of the Linnæan Transactions. The first 14 volumes of the Quarterly Review; and the first 10 volumes of Dr. Brewster's and Professor Jameson's Edinburgh Philosophical Journal.

The following Authors have presented their works during the year:—Sir Henry Hallford, Bart.; Sir Gilbert Blane, Bart.; Dr. Knox, Edinburgh; W. F. Ferguson, Esq.; R. Orton, Esq.; Dr. Macmichael; Dr. J.

* With which has been purchased Alibert's great work on Diseases of the Skin, &c.

† Purchased Buffon's Natural History, 20 vols.

‡ Purchased Vicq-d'Azyr, Anatomie et Physiologie, et Scarpa Tab. Neurologica.

§ The last six subscriptions purchased Andral's Pathological Anatomy, Monro on Bursa Mucosa, Combe on Insanity, Paris on Diet, and other works.

Walker, 'Bombay establishment; Dr. Alexander Monro, Edinburgh; Dr. Thomas Molison; J. V. Thompson, deputy inspector-general; Dr. John Webster; Assistant Surgeon S. Dickson, royals; Dr. Thomson, Edinburgh. The Royal College of Surgeons, London, have presented some additional parts of their catalogue.

And donations of books have been made by many officers during the year; the most considerable by the under-mentioned gentlemen:—Dr. Strachan, inspector-general; Dr. Cope, field-inspector; Staff Surgeon Burton; Surgeon Roe, 7th dragoon guards; F. Foster, Esq. surgeon, H. P. 56th regiment; Assistant-Surgeon S. Dickson, royals; Assistant-Surgeon Bell, 81st reg.; Sir James M'Grigor; Staff-Assistant Surgeons Dr. Tuthill, Dr. Caw, H. N. Holden, and E. J. Bulteel; Assistant Surgeon Dr. Clark, 13th dragoons; Madras medical board; and Surgeon Fiddes, 85th regiment.

To render the museum and library thoroughly useful, to inform every member of the department of the contents of both, and to enable those who desire it to consult either, printed catalogues are absolutely necessary. These catalogues must be full and descriptive; and all particulars, with the names of donors, &c. should be given. There are no means of accomplishing this necessary work, which will render useful the library and museum, but by subscription among the officers of the department; and it cannot be doubted, but that the liberality which has already effected so much for these institutions, and brought the library and museum to their present very respectable state, will now accomplish this object.

The additions made to the valuable records, under Dr. Gordon, in the year, have been of great value and extent; and, as is well known, these are open to the profession at large. They now are—

FOL. VOLS.

1. Historical Monthly Reports, from 1816 to May 1832	6
2. Annual Returns and Reports, from 1816 to May 1832	134
3. Histories of Epidemic Diseases, being Replies to Queries	2
4. Topography, with maps also several maps unbound.	6
5. Valuable Papers on the Syphilitic Question	1
6. Abstract of the Quarterly and Monthly Sick Returns, at Home and Abroad, from 1816 to May 1832	3
7. Reports, &c. on Cholera . . .	1
8. A large collection of cases of particular diseases, with <i>post-mortem</i> appearances	

The deaths, during the year, of many old and respectable members of the department, while it excited the sympathy and condolence of the meeting, elicited the expression of regret that no biographical notice was offered by any of their friends.

Before the meeting separated, thanks were unanimously voted to Dr. Clark, to the committee of the museum, the library committee, and to Dr. Gordon.

While we insert the preceding document with the view of drawing the attention of the profession, military and civil, to the desiderata in the Fort Pitt Museum, and the claims which it has on their attention and support for contributing such supplies as their opportunities may enable them to procure, we embrace the present opportunity of directing the attention of the profession at large, and of all those who are interested in the progress of science, to the varied and extensive collection of manuscript records now acquired. These records must now comprehend a great number of valuable and instructive documents, illustrative of medical topography and statistics; the rise, progress, and decline of epidemics; and the prevalence of endemic diseases. While no one can doubt that the Director-General and the Secretary have very great merit in commencing, continuing, and enlarging this collection, we must say that in

1. Historical Monthly Reports, from 1816 to May 1832	6
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its present state it is almost entirely useless and unprofitable. That they are open to the profession at large, is of little avail so long as they are in manuscript. Manuscript folios cannot be conveyed to the Mediterranean, to the coast of Africa, to the East and West Indies, or the shores of the Pacific. The only way to make their contents available, is to publish at least selections; and there is no doubt that, of a mass of papers so copious, so varied, and collected from sources so numerous and remote, there must be many which would doubtless merit this distinction, and would justify publication. It is certainly singular, that, with the extensive naval and military establishments which we possess under the Pole and on the Tropics, in the East and in the West, in the Atlantic and Pacific, no attempt has been yet made to render those establishments nationally serviceable to the promotion and diffusion of medical knowledge. The surgeons of the East India Company's service have set an excellent example, in effacing the charge of indolence so often brought against them. The army surgeons have also, in all parts of the globe, shown both the desire and the capacity to collect and communicate information. But so long as the results of their labours and experience are confined to the walls of a library, in a manuscript shape, it is manifest that but a small proportion of the profession can possibly know any thing of their contents. Indiscriminate publications we by no means recommend. But it is clear, that, if they are to be generally useful at all, or even if worth consultation, some should be published. Selection, and scrupulous judicious selection must be the ruling principle. It would reflect the highest credit on the Director-General, and add to the services he has rendered, if he would make arrangements for laying some of the most valuable of these documents before the world; and, as we have elsewhere said, some of the accomplished medical officers

in the vicinity of London might be readily induced to lend their aid in selecting the materials, and arranging the details of publication. A memorial such as that of Hautesierck in France, would be to a commercial nation like us the most valuable record that could be imagined, and would constitute a body of information and a source of authority in all questions regarding medical topography, statistics, etiology, and many of the most important questions of state and military medicine, unrivalled in this country, and perhaps in any other. —*Edinburgh Medical and Surgical Journal*, July, 1832.

Hospital Reports.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

BEFORE we commence the detail of cases, we will venture to indulge in a few observations on the general arrangements of this Institution, and in doing so we reluctantly refrain from offering Mr. Guthrie what cannot justly be termed a compliment, on the indefatigable zeal with which he has raised it to its present station, the talent with which he presides over the department peculiarly his own, and the anxiety which he displays in affording opportunities of practice and instruction to the gentlemen who are studying ophthalmic surgery within its walls. These gentlemen, owing to the opportunities which they enjoy, must necessarily extend to a very wide circle, the advantages derived from the establishment of an Ophthalmic Hospital at the West end of the metropolis.

To return from this digression: the hospital is calculated to accommodate both in and out patients. Owing to the expenses which have been incurred in the erection of the building, but few in-patients can at present be received, but the number of those who attend as out-patients

is very considerable. The latter are seen regularly on the days of Mr. Guthrie's attendance, thrice in the week. From 120 to 140 and upwards are usually present. Patients are admitted on application. After the applicant is seen by Mr. Guthrie, he or she is confided to the care of a pupil, who obtains the management of the case under the superintendence, and, if necessary, direction of Mr. Guthrie. Notes of each case, with the record of the treatment, are preserved, and if the details are sufficiently interesting they are transferred to the hospital books, which are kept for the purpose. Such is a general outline of the management of the institution. It is supported by subscribers of one or two guineas annually, who become by their subscription governors. We do not solicit eleemosynary bounty for the hospital, yet we may be permitted to observe that it well deserves the encouragement of those anxious for the diffusion of information and advancement of science in the profession, and of all benevolent and humane individuals out of it. If sufficiently supported, it will be the means of materially diminishing the infirmities and consequently the miseries of the poor in its immediate vicinity, as well as of rendering the young men educated in the West end of the metropolis more qualified to execute their professional duties with credit to themselves, and advantage to the public.

PURULENT OPHTHALMIA.

Gonorrhœal Ophthalmia, treated by the Unguent. Nigrum.

John Durant, ætat. 21, admitted Aug. 10th, 1831. The left eye is destroyed, nearly the whole of the cornea having sloughed away, and the humours having escaped; conjunctiva extremely vascular and chemosed; lids thickened but not much swollen; profuse purulent discharge; no pain.

Purulent inflammation commencing in right eye; conjunctiva and sclero-

tica not much inflamed; discharge slight; complains of pricking pain in the eye, which prevents sleep. Slight discharge from the urethra, with excoriation of the glans and inner surface of the prepuce. Health much impaired; general feverishness, with pains in the joints.

Has had gonorrhœa for the last two months. When gonorrhœa appeared, took Leake's pills for six weeks. The ardor urinæ and discharge diminished, but a fortnight ago the left eye became inflamed. He continued the pills for three or four days, but the eye becoming rapidly worse, he went to a medical practitioner, who applied four leeches to the temple; the leeches were repeated at short intervals to the number of twenty, and a blister was applied behind the ear. Two days ago the right eye became affected, and he was ordered by the same gentleman the same application of four leeches! He states that the disease commenced in the left eye in a manner precisely similar to that in which it appears in the right; the swelling of the lids and discharge came on about the fourth or fifth day, and gradually increased, attended with a throbbing pain, till the eye burst, when all diminished. The discharge from the urethra has gradually lessened since the left eye became affected. He is not aware of having transferred the gonorrhœal matter in any way to the eye; he had gonorrhœa once previously, but it was unaccompanied with any ophthalmic inflammation.

Unguent. nigrum oculo dextro. Lotio aluminis oculo sinistro. Pulv. jalapæ comp.
3j.

11th. Says his right eye is quite free from the pricking sensation before experienced; redness not much diminished.

To foment the eye with tepid water.

12th. Inflammation of right eye much less, sight stronger, and he is surprised to hear that the application of the ung. nig. is again necessary. Discharge from left eye diminished.

Pergat.

14th. Inflammation now so trifling that the application of the ointment is omitted to day.

Pulv. jalap. comp. ʒj.

17th. Right eye nearly well; no pain in left.

Guttæ. argent. nit. (gr. viij. ad ʒj.) ocul. sing.

Sept. 2nd. Left eye has been gradually improving; right quite well.

Gonorrhæal Ophthalmia cured by Black Ointment.

James Griffiths, æt. 19, admitted Nov. 17th, 1831.

Both eyes inflamed; conjunctiva very vascular and slightly chemosed; cornea and iris healthy, but sight dim; not much pain. Has had gonorrhœa for a fortnight, and the discharge from the urethra still exists, but has lately much diminished. The eyes have been hot, itchy, and uncomfortable for the last week, but inflamed for two days only; the inflammation rapidly becoming worse, he came to this hospital.

Ung. nigrum ocul. sing. Hyd. sub. gr. vj. c. Mag. sulph. postea.

The ointment and pills were repeated on the 18th and 19th.

20th. Very much better; no remaining inflammation, save a slight increase of vascularity of the palpebral conjunctivæ; still slight discharge from the urethra.

Omr. ung. nigrum. Guttæ arg. nit. (gr. vj. ad ʒj.)

21st. *Rep. guttæ.*

23rd. Well—dismissed.

Gonorrhæal Ophthalmia; frequent Relapses; cured.

John Haynes, æt. 21, admitted Nov. 27th, 1831. Conjunctiva and sclerotica of right eye exceedingly vascular, with slight chemosis, cornea dim with small ulcer in its centre; iris darker than that of other eye, but pupil regular and acting freely. Lids much swollen and inflamed, so that he cannot open the eye so widely as the left. Constant discharge of hot tears, but no purulent matter. Eye

feels very hot and uneasy, but is free from pain; sight very dim. Slight discharge from the urethra without scalding.

Has had gonorrhœa for six weeks and taken copaiba. Inflammation of eye came on three days ago. He thinks it was caused by dirt getting into the eye, as the sensation was similar to what such would produce, but no extraneous substance could be found on examination. The inflammation has been gradually increasing.

Ung. nigrum oculo. Hyd. sub. gr. vj. statim. Postea Pulv. jal. c.

28th. Eye feels much easier and cooler; epiphora diminished; redness much as yesterday; ointment caused pain for two hours.

Rep. ung. c pil.

29th. Better; less redness; no pain.

Rep omnia.

30th. Inflammation of conjunctiva much diminished; iris and cornea not improved in the same proportion; no pain; sight much clearer; bowels well open.

Rep. omnia.

December 1st. Improving; cornea clearer; ulcer not so distinct; purged. *P.*

2nd. Going on well. Cornea brighter; iris of natural colour; chief vascularity at margin of cornea. Eye-lids still much inflamed, and urethral discharge continues. *P.*

On the 5th the improvement was such that the ointment was discontinued, and the solution of nitrate of silver applied night and morning. On the 12th nothing remained but a slight inflammation of the palpebral conjunctiva. On the morning of the 13th the whole conjunctiva was found to be inflamed, with epiphora, but no pain.

Ung. nigrum. Pulv. jalap. c.

14th. No redness this morning; slight discharge of tears. *Resumr. guttæ argent. nit.*

19th. Came to-day with left eye inflamed. On the evening of the 17th

he first felt the eye uneasy, the uneasiness rapidly increased, and now the conjunctiva and sclerotica are much inflamed; cornea and iris natural; heat and pricking pain in the eye.

Ung. nig. Pulv. Jal. comp.

20th. Better; less inflammation; very little pain.

Cal. gr. vj. h. n. mag. sulph. cras.

23rd. Not so well. Conjunctiva and sclerotica more inflamed; lids swollen; epiphora; eye feels hot and heavy.

Ung. nigrum. Ant. tart. gr. ij. c. Mag. sulph. ʒss.

24th. Emeto-purgative operated; very little inflammation, save of palpebral conjunctiva.

Cupri sulph. palpeb.

We need not pursue the details farther; the patient was cured, but several slight relapses occurred.

These are all the cases of gonorrhœal ophthalmia entered in the books, as having been treated at the hospital within the last nine months. They are taken indiscriminately, and will serve, perhaps, to dispel the prejudices of those who look upon the stimulating plan of treatment as a dangerous and unnatural innovation on the vested rights of leeches and phlebotomists. We can only judge of the merits of a particular mode of practice by comparing it with other modes. The most strenuous advocate of depletion could hardly choose a better text-book than the work of Mr. Lawrence on *Gonorrhœal Ophthalmia*. The amount of depletion resorted to in many of the cases treated and recorded by that gentleman is enormous. Patients were almost brought to the verge of the grave by the lancet, yet the inflammation of the eye went on, in too many, to the destruction of the organ. It surely is a cutting satire on depletion, when its warmest advocate publishes a collection of cases in which it is employed with almost uniform want of success. If any gentlemen feel a doubt of the comparative safety and value

of stimulants and depletion, we would recommend them to place side by side, and carefully compare, the foregoing cases reported from this hospital, with the long list of failures in Mr. Lawrence's work.—*Med.-Chirur. Review.*—July.

*Cases of Contraction of the Vagina.**

Case 1.—“ Its subject was a lady of thirty-nine years of age, whose spine was considerably distorted by an injury which she accidentally sustained during her infancy. When she had been in labour only for two or three hours, she was advised by her monthly nurse, who probably anticipated more than ordinary difficulty, to send for her medical attendant. On the author's arrival, he found the orifice of the uterus very amply dilated, NEARLY OBLITERATED, and the foetal head presenting favourably. In ascertaining these facts, however, he encountered some difficulty in carrying his finger through the middle of the vagina, where he found it contracted into a very narrow diameter, and presenting such a feel as it might have been expected to present, if it had been bound by a ligature coiled round it on the outside. It moreover felt firm, thick, and rigid. The mother of the patient being in attendance, reported that her daughter had always menstruated regularly and well, and that she had never been the subject of any known disorder of her genital organs. The affected part gave no evidence of its ever having been the subject of cicatrization. Time and patience, therefore, presented themselves as the principal remedies. The cavity of the pelvis was sufficiently ample. The labour pains became very active in the course even of a few hours, and ultimately exceedingly urgent, accompanied by a tempestuous excitement of the heart and arteries.

* Dr. Davis's "Obstetric Medicine." Part VI.

The patient was bled freely and repeatedly, and the hand was as much used to promote dilatation as was deemed consistent with the soundness and safety of the part to be dilated. She was delivered of a still born child in about FIFTY HOURS after the commencement of the labour. She recovered slowly but perfectly. She sustained no retention of urine, nor purulent discharges during her convalescence. The loss of an heir to a good property, as it might well be supposed, was not a little regretted. But the disappointment was forgotten, and the loss doubly repaired by the subsequent birth of two living children, both sons."

In some cases of contracted vagina a considerable, and we may say, sudden dilatation occurs during labour, of which the following is not a bad example.

Case 2.—The wife of a corn-chandler had a first labour of long duration, and attended with great excitement of the heart and arteries, and during her recovery she was subject to severe purulent discharge. In the next labour, another medical practitioner was employed. On making the usual examination, he found the vagina, about an inch and a half from its orifice, so contracted that he could not pass his finger through the narrowed portion. He ordered the patient a dose of castor oil: and, as it was early in the labour and late in the evening, he left her till the following morning. He then found that the pains had been neither frequent nor urgent; the contracted part of the vagina was somewhat less rigid, and, on one side of the ring, it was distinctly soft and relaxed. Nothing further was done till the following evening, when the labour became more active and the circulation began to be excited. The morbid ring was dilated to the size of about half a crown, continuing rigid, tuberculated, and thick on one side—soft on the other. The medical practitioner employed a full bleeding, exhibited forty

drops of Battley's sedative, and remained with the patient during the night. Early next morning he sent for Dr. Davis, who did not arrive till 3 P. M. The orifice of the uterus was now dilated to the diameter of two inches and a half, the head of the child had descended nearly half way into the pelvis, *the membranes were unruptured*, the left side of the vagina felt hard and greatly thickened, but the other was soft and disposed to dilatation, when the child's head was propelled by the uterine contractions against it. The excitement of the heart and arteries was considerable, the skin moist. A pound of blood was abstracted. At nine P. M., the symptoms were more formidable; the arterial action was very great, the countenance expressive of great suffering, the patient extremely restless. The liquor amnii had escaped for several hours; but the descent of the foetal head had made great progress, one-third of it being in the act of clearing the impediment of the left side of the vagina. There was doubt as to what should be done; but, abandoning a resort to the forceps or the knife, it was determined to try the effect of another bleeding. The patient was accordingly bled to faintness (thirty-two ounces), and with success. The excitement was allayed, and the patient, after sustaining some fifteen or twenty more powerful pains, was delivered of a living and well-grown child. Her recovery was speedy and perfect, and her family now consists of four children, of which the three younger have been born at the eighth month of gestation, in consequence of premature labour having been purposely induced in the pregnancies subsequent to the one we have described. All the labours have been extremely slow, and the two last rather alarmingly severe.

[Dr. Davis's work abounds with instructive cases.—Eds.]

DE RE BAGSTER.

THE following is part of a paragraph which appears in *The Times* newspaper of Monday the 16th inst.:—

“We never read any reports where medical evidence is given without blushing for the state of medical science in England, and being convinced that this branch of education is defective, not only as regards the inculcation of sound principles, but even in the application of undoubted *facts* to recognized principles.”

This observation is connected with a remark or two which are made upon the decision of the jury, in the recent case of the *Commission de Lunatico*, &c. which has excited such intense interest in the mind (it may truly be said) of all classes. One of the remarks conveys a censure on some of the medical witnesses who were examined upon the occasion, and in making it the writer certainly coincides with the general opinion. Three physicians and a surgeon were examined in support of the allegation; two were brought forward to disprove it; and it is next to impossible that any one of *competently* sound mind can peruse the details, without being forcibly struck with the contrast.

After the *common-place* report of the gentlemen who appeared on behalf of the application, it was absolutely refreshing to proceed to the manly and professional-like statements of Drs. MORRISON and HASLAM. The former gave his evidence in a clear and satisfactory manner, which should and must entitle him to universal esteem and confidence; and it is particularly valuable, as it displayed as thorough a knowledge of an almost recondite subject, as we can conceive the talents of any man (aided by due diligence,) capable of acquiring, applied to an important particular purpose. Dr. HASLAM, however, with the vigour, skill, and tact of an experienced veteran did, in a style perhaps unprecedented, repel

the arrogant, the impertinent, and desperate attack of a brow-beating lawyer. Little did the learned counsel know of his man, or of what an expert and self-collected medical jurist can display in the witness-box. What was his metaphysics worth when he rang the changes upon the words *whim, idea, belief*, until he was fairly driven up in a corner by the Doctor's *masterly* replies, and compelled to cry for quarter, by saying that the witness was rambling? We recollect, upon a former occasion, when our learned *confrere* was placed in a similar situation, a barrister, finding him too much for his management, pronounced his testimony to be “*rub-bish*.” When argument and knowledge fail, it is a common trick to become abusive and call names.

Dr. HASLAM, however, will pardon us if we advert to a point connected with this subject, not for his correction, but for the benefit of young members of the profession acting as witnesses. In one of his writings he sagely cautions the witness against retorting upon the examining counsel; dissuading the medical man most earnestly from fencing with the lawyer's weapon. This dissuasion should ever be kept in mind, although the author of it did, upon the occasion in question, certainly depart from the rule laid down, as far as we know, *originally* by himself. But Dr. H. may safely venture where it would be highly dangerous for another to go; and a lawyer can be silenced by any intelligent witness, desirous only to speak the truth, who retains his self-possession, is in no haste to be dismissed, and will not answer a question until he understands it.

The writer of this, in the presence of the learned and diligent Editor of *The Medical and Surgical Journal*, *three times in succession*, refused to answer a question put by THE BENCH, simply because he did not choose to approve of the terms in which it was couched by the presiding Judge.

GABRIEL.

SUCCESS OF DR. MURRAY'S EXHAUSTED AIR-BATH IN CHOLERA.

GENTLEMEN,

I HAVE the pleasure to mention, that three more trials of the abstraction of about *twenty cwt. of air* off each patient, produced manifest advantage, brought back the pulse to the wrist, heat to the skin, and greatly improved the aspect and feelings of the sick. The three are yet living, and the result shall be sent to you as soon as possible. The patent air-tight cloth, let down over the head, and adapted round the apex of the thorax, is best suited to enable the patient to take drink and medicine. On the whole, this agent will be important if used before the powers of life are exhausted.

A vessel to draw up to the loins, having a proper ring at the top, and another vessel to let down on the former, with another ring to adapt it air-tight, is the best mode to use the bath *horizontally*. On the shoulder of the upper vessel the oiled silk cloth is tied, having a crucial incision to adapt it to the top of the thorax, and a collar of wet bladder let down on it excludes the air. The vessels are made of tinned-iron, or thin copper; probably patent cloth, adapted to one of the rings, would improve it that it might bend.

Your's most truly,

J. MURRAY.

Mountjoy Square, July 17, 1832.

NECROLOGY.

Joseph Thackeray, M.D. died at Bedford of inflammation of the bowels. This gentleman was universally beloved. The greatest respect was paid his remains, which were accompanied to the tomb by 350 of the most respectable and influential men in the county and town of Bedford.

At Granby Row, Dublin, Dr. Ferguson, died of cholera.

At Belfast, Dr. Buchanan, lost his life by cholera.

At Brighton, Mr. A. Macann, surgeon, of Parliament-street, Westminster.

NOTICES TO CORRESPONDENTS.

Amicus Justitiæ.—There is no doubt but that verdicts will be set aside. It is folly to abuse the public press, which advocates impartial justice and common usage. If the plaintiff's reputation was only worth a farthing on Monday, it was not worth 400*l.* on Tuesday; if prized at 400*l.* on Tuesday, it certainly was not worth more than the smallest coin on Monday.

A Coanite.—We are much obliged for the suggestions, which shall be followed as far as practicable,

R.—The conduct of the surgeon shewed great carelessness, but the facts are of no general interest. Every one knows that physicians and surgeons who are extensively engaged in practice, do not give cases that mature consideration which they merit. Younger practitioners would benefit the sick much more, but the world will prefer the former.

Eyes Right.—The addition of the names of forty eminent medical men to a puffing mechanic's advertisement is a disgrace to the profession.

Crito.—The work has not been sent us.

Mr. Marshall's paper in our next.

The members of the profession, who consider the damages awarded in the case of *Ramadge v. Ryan* excessive, have commenced a subscription to enable the defendant to apply for a new trial.

SUBSCRIPTIONS RECEIVED.

	£.	s.	d.
Dr. James Johnson	10	10	0
Dr. Uwins	2	2	0
Dr. Tweedie	5	5	0
W. B. Costello, Esq.	5	5	0
A. C. Hutchinson, Esq. ...	2	2	0
J. P. Holmes, Esq.	2	2	0
Greville Jones, Esq.	2	2	0
— Skey, Esq.	2	2	0
A Naval Surgeon	2	2	0
J. Foote, Esq.	1	1	0
M. W. Henry, Esq.	1	1	0
Dr. Harrison	10	10	0
Dr. Blicke	5	5	0
Morgan Austin, Esq.	2	2	0
A Dresser of St. Bartholomew's Hospital	2	2	0
E. L. Devonald, Esq.	1	1	0
P. Reilly, Esq.	1	1	0
Alex. M'Nab, Esq.	1	1	0
M. D.	2	2	0
Dr. Hood, Brighton.	5	5	0
W. Hughes, Esq.	1	1	0
W. F. Crump, Esq.	1	1	0
A Lady.	2	2	0
J. Ingleby, Esq.	1	1	0
Professor Cooper	2	2	0
E. A.	5	5	0
An Hospital Surgeon	5	5	0

Errata.—In No. 23, p. 699, for "C.L. Devouard," read "E. L. Devonald;" for "Aberforth," read "Aberporth."

In p. 752, 7th paragraph, for "baneful," read "beneficial."

London Medical and Surgical Journal.

No. 26.

SATURDAY, JULY 28, 1832.

VOL. I.

SELECTIONS
FROM THE
CLINICAL LECTURES,
DELIVERED AT THE
HOTEL-DIEU IN PARIS,

During the Session of 1831-32;

BY BARON DUPUYTREN,
PRINCIPAL SURGEON OF THAT HOSPITAL.

Prolapsus Recti.

It has been incessantly repeated, that surgery is a science at present carried to its highest degree of perfection; nevertheless discoveries in operations, more or less important, are made every day. A few years since, M. Boyer was enabled to cure fissures of the anus by simple incisions. Prolapsus of the mucous membrane of the rectum, an affection if not one of the most serious, at least one of the most inconvenient, has been treated, until latterly, by powerless or merely palliative measures. A permanent cure can now be effected by an operation as simple as its effects are certain. You are aware that this disease, more common in infancy and in old age than at any other period of life, consists in an eversion of the intestine, the superior part becoming invaginated in the inferior, as far down as the anus, and sometimes projecting two, four, five, or even six inches beyond it. This prolapsus generally takes place every time the patient goes to the water-closet, but in some persons, whenever they stand for a long while. This disposition appears often to coincide with a feeble, soft, lymphatic, and hæmorrhoidal constitution.

The first measure indicated is to return the prolapsed intestine, which can be readily done in some cases, but not always; it sometimes happens that the tumefaction of the parts is so great, and the sphincter is so strongly contracted, that the intestine becomes

strangled, and immediate assistance is urgently required. The protruded intestine is then doubled and tripled in volume; it becomes of a red or violet colour, ecchymosed, and sometimes threatened with gangrene in parts. In these cases the reduction ought to be performed immediately, and in the following manner:—The patient is laid on the belly, and the pelvis raised by one or two pillows, so that it becomes the highest part of the body. After enveloping the whole length of the tumour in wetted linen, and placing a compress in the middle of its external extremity, gentle pressure should be made on the base so as to diminish its volume, and it is to be gently pushed inwards with the finger. The reduction thus commences by the part which was expelled last. If this tumour cannot be reduced, some writers advise scarifications to be made, but it must be remembered that they are wounds, and will consequently give rise to inflammation of the great intestine, so that they should be avoided as much as possible. So likewise with leeches, the application of which may cause internal or external hæmorrhage, and intestinal ulceration.

Even when the reduction has been effected, the disposition which has given rise to the exit of the intestine still remains; so that this measure, which may be considered as palliative, and in some cases as preservative from serious injury, can never be employed as curative.

Lotions and cold baths have been employed in the treatment, with the view of strengthening the action of the sphincter, and preventing the prolapsus. Cold baths have in fact sometimes succeeded, but they require time and perseverance, and cause such disagreeable sensations that many patients cannot bear them, and will not allow them to be continued. Astringent lotions, compression made with a sponge covered with fine linen, and supported by a T bandage, or by a more or less complicated mechanical apparatus, various suppositories, &c. &c. which have been sometimes successful in children after a cer-

tain time, nevertheless fail very frequently, and especially with adults and old persons. In such cases, recourse must be had to an operation, the excision of the protruded portion, or of that part which is most prominent, and of the hæmorrhoids which may exist on the mucous surface. But this excision, which many practitioners, and among whom stands Sabatier, have praised, exposes the patient to severe accidents, and especially to hæmorrhage, which may become serious, and has been sometimes fatal. The ablation of a greater or smaller portion of this mucous projection and of hæmorrhoids, followed by the application of the actual cautery, independently of the sharp pain it causes, may determine a severe and more or less dangerous inflammation of the intestine, and of the neck of the bladder.

For these reasons I have for some time sought for a new mode of treating this disease, which, freed from the inconveniences of former methods, may be more certain in its results; and I shall proceed to delineate the operation which I have practised for some years, after a short description of the anatomical structure of the parts.

The skin, which covers the margin of the anus, is thinner and of a different colour to that of other parts of the body; it contains mucous cryptæ in great number, which secrete an oily matter with a peculiar odour. This skin forms projecting folds, separated by as many sulci, which converge from the circumference of the margin to the centre of the anus; these folds enter the anus itself, and are more numerous and more projecting the more contracted that aperture is; they disappear or efface when it is dilated; it may therefore be supposed that their use is to facilitate the dilatation of the anus, and to favour the excretion of the fæces. Next to the skin there is a layer of fibro-cellular tissue, above the external and internal sphincters, two organs formed by circular, muscular fibres.

Having thus made known the anatomical structure of the parts, I shall now describe the operation:—The patient is laid on his belly, the upper part of the body and the head being lowered, the pelvis on the contrary, being very much raised by means of one or more pillows; the thighs and nates are to be separated, so as to bring the margin of the anus, and the anus itself, into view; I then, having a pair of dissecting forceps, with large blades, so as to cause least pain to the patient, take hold of one, two, three, four, five, or six of these folds, successively to the right, and left, and even before and behind; with a pair of curved scissors, held in the right hand, I remove each of these folds as they are taken up; the excision must be prolonged as far as the anus, and even within it, in order that the action may extend beyond the opening; it may be carried as far as half an inch, if the relaxation is very considerable, but in general

a few lines are sufficient. If the relaxation is not very great, one, two, or three, folds may be removed on each side; if it is very extensive, it will be requisite to remove a greater number.

This operation gives very little pain, and is not followed by hæmorrhage, as the cutaneous vessels only can furnish blood, and, at the utmost, the extremities only of the hæmorrhoidal arteries can be injured. If, however, the excision is carried very deeply, it may be supposed that the internal hæmorrhoidal vessels may cause an effusion of blood.

The consequences of this operation may be easily deduced from the anatomical disposition of the parts; there is an excessive dilatability of the anus; it is proposed to cure it by cutting away one of the tissues which compose it, and strengthening the others; this double end is obtained by the excision of the skin, and the inflammation which is consequently set up. The cicatrix, which is formed by bringing the edges of the wounds together, and by the formation of an accidental tissue, evidently contracts the anus. An accidental, closely adhering skin, is thus substituted for one which was extremely loose. The inflammation which takes place, besides, as a consequence of this simple operation, extending itself in the sub-mucous cellular tissue of the rectum, contributes to increase the adhesion of the mucous membrane with the fleshy tunic.

Dressings are not required; the pain causes an immediate contraction of the sphincters; the inflammation is rapidly communicated from the incisions to the cellular tissue and the sphincters. The patients do not generally go to the water-closet for the first few days; the inflammation soon diminishes, the sphincters relax for an instant for the passage of fæcal matter, but they are ready to contract on the slightest effort; cicatrization occurs in a few days, the excrement then no longer acts on the ulcerated parts, the opening is diminished, and the cure perfect. I performed this operation about ten years ago for the first time, and have since employed it very frequently, and always with the same success. I have never seen a relapse take place except in one case, where from the indolence, the cries, and struggles of the child on whom I was operating, it was not properly performed. The discovery of the operation undoubtedly belongs to me. That which was employed by Hey, (*Practical Observations*,) to cure a patient affected with hæmorrhoids complicated with procidentia recti, differs from it in many essential respects. You may see in fact in the cases narrated by that surgeon, and by those who have imitated him, that the patients were only accidentally cured of the prolapsion of the rectum, by an operation exclusively employed for the relief of the hæmorrhoids, and which can only be used in those cases where the procidentia is the consecutive effect of

the hæmorrhoidal disease. My operation, on the contrary, applies especially to those cases in which this complication does not exist. I am convinced that nothing but excision of the margin of the anus, can free the patients from this disgusting disease.

Case 1st.—A young and well-formed female, who had been affected with procidentia of the mucous membrane of the rectum for many years, was admitted into the Hôtel-Dieu, in the month of May, 1830. She could not attribute it to any cause that she was aware of. The disease was not complicated with any hæmorrhoidal affection, but it presented the singularity of occurring only once a month for a few days at the time when she went to the water-closet. The inconvenience, pain, and a glairy mucous discharge which resulted were such that she readily assented to the performance of an operation. The patient being placed on the abdomen on the bed, the pelvis raised, and the nates separated by an assistant on either side, I took hold of a fold of the margin of the anus, raised it, and cut it away, prolonging the incision as high as possible into the rectum. Four folds were thus successively removed, from before, behind, and on the sides. The pain resulting from this operation was very slight, and there was not any hæmorrhage; no dressings were applied, and when the patient went to the water-closet a few days afterwards, the rectum did not descend. At the end of fifteen days cicatrization was complete, and the patient then left the hospital.

Case the 2nd.—During the latter part of November, 1831, a well formed child, about three years of age, was brought as an out-patient. He had been subject to prolapsus recti, occurring whenever he went to stool, for some time.

This child, who enjoyed good health, was nevertheless of a lymphatic constitution. The operation was performed as already described; the patient was laid on the belly, a pillow placed beneath him, and the thighs and nates kept separate by two assistants; three folds were then successively removed to within a line or two of the anus. Very little blood was lost. The next day, on going to stool, the intestine came down, a very rare, but not a serious, accident. Fifteen days afterwards I saw him; he was perfectly cured, and cicatrization was nearly complete.

As the Baron has alluded to Mr. Hey's practice in the course of this lecture, we have thought it right to insert one of the cases condensed from that gentleman's work, more especially as it appears to us, that although Mr. Hey has not fully described his operation, yet he has fairly delineated the principle on which the procidentia is to be cured, and which, consequently, cannot belong to the Baron, who has merely the merit of describing the operation.—EDS.

Mr. Hey on Prolapsus Recti.

In autumn, 1788, Mr. W. of Hull, consulted Mr. Hey on account of a complete and most troublesome *procidentia ani*, which came on whenever he had a stool, and continued for some hours, the gut gradually retiring, and at last disappearing, until he had occasion to go again to the vault. While the intestine remained prolapsed, there was a copious discharge from the part of a serous and mucous fluid mixed with blood.

Although he had no pain nor other inconvenience during the intervals of these attacks, yet the anus did not return to its natural state. It was constantly surrounded by a thin pendulous flap, which was formed by the integuments, and hung down to the extent of three fourths of an inch in general. The anus was also surrounded with several soft tubercles of a bluish colour, which were situated at the basis and interior parts of the pendulous flap. These tubercles had the same appearance as those which often remain in persons who have been frequently afflicted with the external piles, and were evidently formed by the extremity of the rectum.

From the patient's history of the case, it appears that from his infancy he was subject to prolapsion, which was afterwards followed by hæmorrhage. The disease gradually increased, and at last he seldom parted with a stool in less time than twenty or thirty minutes, and often voided a good deal of blood.

He placed himself under medical care with occasional relief. Mr. H. tried the effects of oak, bark, and lime water, kept applied to the part by a bandage, but the disease was too obstinate to be cured by such treatment.

He remarks that, "Although the prolapsed part of the intestine consisted of the whole inferior extremity of the rectum, and was of considerable bulk, yet the impediment to reduction did not arise from the stricture of the sphincter ani, for I could introduce my finger with ease during the procidentia; but it seemed to arise from the relaxed state of the lowest part of the intestine, and of the cellular membrane which connects it with the circumjacent parts."

"My attempt" (at reduction) "proved vain as to its immediate object, yet it suggested an idea which led to a perfect cure of this obstinate disorder."

"The relaxed state of the part which came down at every evacuation, and the want of sufficient stricture in the sphincter ani, satisfied me that it was impossible to afford any effectual relief to my patient, unless I could bring about a more firm adhesion to the surrounding cellular membrane, and increase the proper action of the sphincter. Nothing seemed to me so likely to effect these purposes, as the removal of the pendulous flap, and the other protuberances which surrounded the anus. I hoped that the inflammation caused by this operation would produce a

more firm adhesion of the rectum to the surrounding cellular substance; and I could not doubt that the circular wound would bring on a greater stricture in the sphincter ani."

The operation was performed, and very little blood lost by the incisions. The patient recovered and remained well.—*Practical Observations in Surgery, illustrated with Cases.* 1803.

THE
ANATOMICAL EXERCITATIONS

OF

WILLIAM HARVEY, M.D.

(Continued from page 687.)

BUT to determine and give a reason to all of this, we have nothing else to do but to endeavour to discover on what account were the lungs made. And thus much relative to them, and their use and motion, and of all manner of cooling, of the necessity and use of air, and the like, in several and different organs made in animals have been described by me. Although, by observation, I have discovered a great many things to account for this cause, yet, lest I should appear to be straying from my purpose on the motion of the heart, and deviate from my intention, I shall decline it, and leave these things to be more fully explained in a treatise on themselves; and, that I may return to my former subject, I shall go on to prove what remains. And first of all, that in the more perfect animals (as in man), and those that are adults, the blood may pass from the right ventricle of the heart, through the vena arteriosa, into the lungs, and thence by the arteria venosa into the left auricle, and then penetrates into the left ventricle of the heart. And first of all I proceed to prove that this can happen, and then that it is accomplished.

CHAPTER VII.

That the blood does pass from the right ventricle of the heart, through the parenchyma of the lungs, into the arteria venosa, and from thence into the left ventricle.

It is well known that it is possible this may be done, and that there is nothing which can prevent it, when we consider which way the water penetrates through the substance of the earth, procreates brooks and fountains; or if we consider in what manner the sweat penetrates through the skin; or how urine flows through the parenchyma of the kidneys. This is easily detected in those, who drink of the waters of the Spa, or de la Madonna (as they are called in the land of Padua), or other acidulated or vitriolated drinks; or those who in carousing drink to excess, and in an hour or two pass all the fluid through

the bladder. This great quantity ought to stay awhile in concoction, and ought to pass through the liver (in the same manner that our food does), and also through the veins, the parenchyma of the kidneys, and likewise through the ureters into the bladder.

Those then whom I hear declare it impossible, that the whole mass of blood can pass through the substance of the lungs, they may as well assert the impossibility of the secretion of the liver making our food nourishing. Such kind of men (I speak with the poet), where they have any object in view they will easily grant, but where they have not they will stick to their opinion; here where need is they are afraid, but where no need is they are not afraid to affirm.

The parenchyma of the liver, and likewise of the kidneys too, are much thicker than that of the lungs, because their texture is much thinner, and of a spongy substance, if they are compared to the liver and kidneys.

In the liver there is no impetus, nor no forcing strength; in the lungs, on the contrary, the blood is thrust against them by the pulsation or impulsion of the right ventricle of the heart, which impulsion must necessarily be followed by a distention of the vessels and porosities of the lungs. Besides the lungs in respiration rise and fall (*Galen de Usu Part*), by which motion it follows of necessity, that the porosities, and their vessels, are opened and shut, just as it happens in sponges, and particularly in all things that have a spongy substance, when they are contracted and dilated again. The liver on the contrary is at rest, nor is it seen at any time to be contracted or dilated.

Finally, if there is any one who does not believe that through the liver the vigor or juice of the ingesta may be able to pass into the vena cava, then in man, as in oxen and the greatest animals; and beside this it must pass some way into the veins if there be any nutrition, and there is no other way, and for that cause they are compelled to affirm this; why should they not likewise entertain similar ideas as regards the passage of the blood through the lungs of men, who are come to manhood, based upon the same arguments, and with Columbus, a most skilful and learned anatomist, assert and believe the same from the structure and largeness of the lungs, because that the arteria venosa, and likewise the ventricle, are always filled with blood, which must of course be brought from the veins, through no other way than that of the lungs, as all of us, from our words before, from our own eye sight, and numerous other arguments, do believe to be right.

But then there are some persons who admit nothing, unless there is an authority alleged for it; it is fit that they should know that the very same truth may be attested by Galen's own words, that is to say, not only that the blood may be transfused from the vena arteriosa into the arteria venosa, and thence into

the left ventricle of the heart, and afterwards is transmitted into the arteries; but this is also performed by a continued beating of the heart and motion of the lungs during respiration.

There are in the orifice of the *venæ arteriosæ* three sigmoid or semilunar valves, which prevent the blood sent into that *vena arteriosa* to return to the heart. And this every one knows. Galen expresses the use and necessity of these valves in the following words. (Lib. 6. de usu part. cap. 10.) He says, "in all there is a mutual anastomosis or opening of the veins at the same time with the arteries, and they borrow both blood and spirit from one another through invisible and very narrow passages. But if the very mouth of the *vena arteriosa* had always stood open, and nature had invented no device or machine to shut it, when it was necessary to open it again, it never could have happened that by those invisible and narrow passages, the thorax being contracted, the blood could be transfused into the arteries. Neither is all the blood extracted from any source and emitted after the same manner; but as that which is light is more easily attracted than that which is heavy by dilatation of the instruments, and by its construction is forced out again, so that anything is more easily attracted through a broad passage than through a narrow one, and is again emitted forth; but when the thorax is contracted, the *arteriæ venosæ*, which are in the lungs, pulsating on every side, and compressed together strongly, do send forth very quickly the spirit that they contain, and transmit through those fine apertures a portion of the blood, which never could be effected if through that great mouth (such as in the *vena arteriosa*) the blood could be able to return back to the heart. Now the return of it through that great opening being blocked up, whilst it is pressed from thence, and some of it does run down through those small orifices into the arteries."

And after a little he continues in the following chapter:—"How much more the thorax endeavours to press out the blood, so much the more those membranes (that is to say those sigmoid valves), accurately close the opening, and they permit nothing to return." And which he likewise affirms in the tenth chapter preceding:—"Unless they were valves there would follow a threefold inconvenience, so that the blood would then take this long course, and after be frustrated, by flowing in the diastoles of the lungs and filling all the veins in them and in the systoles, just as it were neap-tides or low-tides, like Euripus, reciprocating its motion backwards and forwards, which would not be convenient to the blood. But this way appears to be of no importance; but still such is its import, that in a very short time it would impede and injure respiration." And a little after he says—"And likewise the next inconvenience would be as important a one as the former;

when for instance in respiring, the blood might return backwards, unless our Creator had formed the natural position of our membranes, thereby preventing any such occurrence." Whence he concludes his eleventh chapter, by stating—"That the use of all these valves are common to each other and serve the same purpose, to prevent the return of the matters (spirit and blood); and either of them have a proper use to abstract matters from the heart, that they may not return to it, and to draw matters into it, that they may not flow from it; for nature would not have the heart to be fatigued with useless labour, nor to supply it with matters when it was necessary to extract, nor to extract when it would be better to supply; but for which effect there are only four orifices to all, two in either ventricle, one receiving and the other rejecting." And he again continues, after a little while—"Furthermore, when one of the vessels, consisting but of one membrane, is implanted in the heart, and the other consisting of a double membrane, is produced from it (Galen means the right ventricle, so do I the left for the self same reason), as if it were necessary that there should be, as it were, a cistern to both, both of them belonging to it, in order that the blood might be drawn out by one and sent forth by another."

That argument which Galen advances for the passage of the blood through the right ventricle out of the *vena cava* into the lungs, we may more rightly apply to the transmissions of the blood out of the veins through the heart into the arteries, merely changing the appellations:

It, however, is plainly evident from the words and places of Galen, a divine man and father of physicians, that the blood does pass from the *vena arteriosa* into the smaller branches of the *arteria venosa*, both by reason of the pulsation of the heart, and also on account of the motion of the lungs and thorax. (See the Commentaries of the most learned Hoffmann on the sixth book of Galen de Uusu Part, which book I saw after I had written these things). It was also necessary that the heart should receive the blood continually into the ventricles, as if there was a cistern to receive and to send forth the blood; and for this reason it was requisite that there should be four kinds of valves, so that the two should serve for the intromission, and the other two for the omission of blood; this being done, unless the blood, like an Euripus, should inconveniently be driven backwards and forwards, or return back, from whence it ought to have been drawn, and to flow from that part where it was requisite it ought to have been sent; and so the heart would have been fatigued with vain labour, and the respiring of the lungs would have been impeded. Finally, our assertion appears to be clearly true, that the blood does continually and incessantly flow through the porosities of the lungs, from the right ventri-

cle into the left, and out of the vena cava into the magna arteria, or great artery. For when the blood is continually sent from the right ventricle into the lungs through the vena arteriosa, and likewise is continually drawn out of the lungs into the left, which appears by what has already been spoken, and the position of the valves; it cannot therefore be possible that it must needs pass through continually. And seeing always and without intermission that the blood enters into the right ventricle of the heart, and is continually going out from the left ventricle, which is also manifest both by reason and sense, it is then impossible that the blood should pass continually through, out of the vena cava into the aorta. That then which is apparent to be done in all animals, and really in all, whilst they appear to be approaching to the age of manhood, by dissection to be made through most open passages. It is also likely to be manifested in those who have attained the age of manhood, by the concealed porosities of the lungs, and also by the tortuosities of its vessels, as exemplified by Galen's own words, and what has already been spoken. Whence it appears, that notwithstanding one ventricle of the heart, that is the left, was sufficient for the distribution of the blood through the whole body, and the eduction of it out of the vena cava into the receptacle of the left ventricle; and so it is to be asserted that the left ventricle was formed in order to be subservient to the lungs, and not only for nutrition. Seeing then such an abundance of aliment, adding to it the help of compulsion, it is in no manner to be believed that the lungs should rather want so much nourishment, and that of blood so much more pure and full of spirit, as it is immediately conveyed to the heart from the ventricles; then either the most pure substance of the brain, or the most resplendent and divine constitution of the eyes, or the flesh of the heart itself, must be more fitly nourished by the coronary artery.

IRISH SURGERY FORTY YEARS AGO.

THE preliminary part of this story may be very briefly told. Tom White, the whipper-in of Blandsfort, in his eagerness to pull off the scut of a hare, leaped into a gravel-pit and broke his back. The faculty conceiving him past all hope of cure, he was handed over to the farrier —

The farrier first stripped Tom to his shirt, and then placed him flat on the great kitchen table, with his face downwards; and having (after being impeded by much roaring and kicking) tied a limb fast to each leg of it (so as to make a St. Andrew's cross of him), he drew a strong table-cloth over the lower part of the sufferer's body; and tying the corners

underneath the table, had the pleasure of seeing Tom White as snug and fast as he could wish, to undergo any degree of torture without being able to shift a quarter of an inch.

Mr. Butler then walked round in a sort of triumph, every now and then giving the knots a pull, to tighten them, and saying, "Mighty well—mighty good! Now stand fast, Tom."

Tom's back being thus duly bared, the doctor ran his immense thumb from top to bottom along the spine, with no small degree of pressure; and whenever the whipper-in roared loudest, Mr. Butler marked the spot he was touching with a lump of chalk. Having, in that way, ascertained the tender parts, he pressed them with all his force, as if he were kneading dough—just, as he said, to settle the joints quite even. * * *

The operator, having concluded his *reconnoitring*, proceeded to realaction. He drew parallel lines with chalk down Tom's back—one on each side the back-bone; at particular points he made a cross stroke, and at the tender parts a double one; so that Tom had a complete ladder delineated on his back, as if the doctor intended that something should mount by it from his waistband to his cravat.

The preliminaries being thus gone through, and Mr. Butler furnished with a couple of red hot irons, such as maimed horses are fired with, he began, in a most deliberate and skilful manner, to fire Tom according to the rules and practice of the *ars veterinaria*. The poor fellow's bellowing, while under the actual cautery, all the people said, they verily believed was the loudest ever heard in that country since the massacre of Mullymart. This part of the operation, indeed, was by no means superficially performed, as Mr. Butler mended the lines and made them all of a uniform depth and colour, much as the writing-master mends the letters and strokes in a child's copying-book; and as they were very straight and regular, and too well broiled to suffer any effusion of red blood, Tom's back did not look much the worse for the tattooing. In truth, if my readers recollect the excellent mode of making a cut down each side of a saddle of mutton, just to elicit the brown gravy, they will have a good idea of the longitudinal cauteries in question. On three or four of the tender places before mentioned, Mr. Butler drew his transverse cross bars, which quite took off the uniform appearance, and gave a sort of garnished look to the whole drawing, which seemed very much to gratify the operator, who again walked round and round the body several times with a red-hot iron in his hand, surveying, and here and there retouching the ragged or uneven parts. This finishing rendered the whipper-in rather hoarse, and his first roars were now changed to softer notes, somewhat as an opera-singer occasionally breaks into his falsetto.

"Howld your bother," said Mr. Butler, to whom Tom's incessant shrieking had become very disagreeable: "howld your *music*, I say, or I'll put a touch on your nose as tight as yourself did on Brown Jack, when I was firing the ring-bone out of him: you're a greater beast yourself nor ever Brown Jack was."

Mr. Butler having partly silenced the whipper-in through fear of the *touch*, the second part of the process was undertaken, namely, depositing what is termed by farriers the cold charge, on the back of Tom White. However, on this occasion the regular practice was somewhat varied, and the cold charge was nearly boiling hot when placed upon the raw ladder on the whipper-in's back. I saw the *torture* boiled in a large iron ladle, and will mention the ingredients, just to show that they were rather more exciting than our milk-and-water charges of the present day—viz. "Burgundy pitch, black pitch, diaculum, yellow wax, white wax, mustard, black resin, white resin, sal ammoniac, bruised hemlock, camphor, spanish flies, and oil of origanum, boiled up with spirits of turpentine, onion juice, and a glass of whiskey; it was kept simmering till it became of a proper consistence for application, and was then *laid on* with a painter's brush, in the same way they calk a pleasure-boat. Four coats of this savoury substance did the farrier successively apply, each one as the former began to cool. But, on the first applitation, even the dread of the touch could not restrain Tom White's vociferation. After this had settled itself in the chinks, he seemed to be quite stupid, and tired of roaring, and lay completely passive, or rather insensible, while Mr. Butler *finished* to his taste, dotting it over with short lamb's wool as thick as it would stick, and then another coat of the unction, with an addition of wool; so that, when completed by several layers of charge and lamb's wool, Tom's back might very well have been mistaken for a saddle of Southdown before it was skinned. A thin ash board was now neatly fitted to it down Tom's spine by the carpenter, and made fast with a few short nails driven into the charge. I believe none of them touched the quick, as the charge appeared above an inch and a half thick, and it was only at the blows of the hammer that the patient seemed to feel extra sensibility. Tom was now untied and helped to rise; his woolly carcase was bandaged all round with long strips of a blanket, which being done, the operation was declared to be completed, in less than three quarters of an hour.

The other servants now began to make merry with Tom White. One asked him, how he liked purgatory?—another, if he'd 'stop thieving,' after that *judgment* on him?—a third, what more could Father Cahill do him? *Doctor* Butler said but little: he assumed great gravity, and directed 'that the

whipper-in should sit up stiff for seven days and nights, by which time the *juices would be dried on him*; after that he might lie down, if he could.'

This indeed was a very useless permission, as the patient's tortures were now only in their infancy. So soon as the charge got cold and stiff in the nitches and fancy figures upon his back, he nearly went mad! so that for a few days they were obliged to strap him with girths to the head of his bed to make him 'stay easy;' and sometimes to gag him, that his roars might not disturb the company in the dining parlour. Wallace the piper said that Tom's roarings put him quite *out*!

When the poor fellow's pains had altogether subsided, and the swathing was off, he cut one of the most curious figures ever seen: he looked as if he had a stake driven through his body; and it was not till the end of four months that Mr. Butler began to pour sweet oil down his neck, between his back and the charge, which he continued to do daily for about another month, till the charge gradually detached itself, and broken-backed Tom was declared cured: in truth, I believe he never felt any inconvenience from his fall afterward."—*Sir J. Barrington's Memoirs.*

[Reader, if you are a qualified medical man, and do not admit that the above practice would kill a dozen of the strongest men in Christendom, we say, God help your patients.—Eds.]

On the Structure of the Human Placenta, and its connexion with the Uterus. By ROBERT LEE, M.D. F.R.S. Physician to the British Lying-in Hospital. 4to. (From *The Philosophical Transactions.*)

Recherches Anatomico-Physiologiques et Chimiques sur la matière colorante du Placenta du quelques Animaux. Par G. BRESCHET, M.D. Chef de Travaux Anatomiques de la Faculté de Medicine de Paris. (Lues à la Societé Philomathique.)

Anatomico-Physiological and Chemical Researches on the Colouring Matter of the Placenta of some Animals. By G. BRESCHET, M.D. &c.

DR. LEE has collated a few of the opinions of distinguished obstetricians on the structure of the placenta, more especially those of Dr. W. and Mr. J. Hunter, and then gives his own views, which though original are anticipated by Professor Velpeau

and others. Our author does not describe the functions of the placenta, but merely its structure, and his remarks are compressed in the following extracts:—

In the communication which I have now the honour of presenting to the Royal Society, I propose to describe certain appearances which I have observed in the examination of six gravid uteri, and many placenta expelled in natural labour, which seem to demonstrate that a cellular structure does not exist in the placenta, and that there is no connexion between this organ and the uterus by great arteries and veins.

If an incision be made through the parietes of the gravid uterus, where the placenta does not adhere, the *membrana decidua* will be observed lining the internal surface, and numerous minute blood-vessels and fibres passing from the inner membrane of the uterus to the decidua. At the circumference of the placenta, the *membrana decidua* separates from the chorion and amnion to pass between the uterus and placenta, and thus forms a complete membranous septum, which is interposed betwixt these organs. The chorion and amnion cover the fetal surface of the placenta; and between these two membranes and the decidua lie the ramifications of the umbilical vein, and arteries subdivided to an almost indefinite extent, and connected together by white slender filaments running in various directions. The placenta thus consists solely of a congeries of the umbilical vessels, covered on the fetal surface by the chorion and amnion, and on the uterine surface by the deciduous membrane, and inclosed between these membranes; it adheres to the fundus, or some part of the uterus by innumerable flocculent fibres and vessels.

On detaching the placenta carefully from the uterus, the deciduous membrane is found to adhere so closely to the umbilical vessels which it covers, that it is impossible to remove it without tearing these vessels. With the fibres uniting the placental decidua to the uterus are mingled numerous small blood-vessels, proceeding from the inner membrane of the uterus to the decidua; and these vessels, though more numerous at the connexion of the placenta with the uterus, exist universally throughout the whole extent of the membrane. There is no vestige of the passage of any great blood-vessel, either artery or vein, through the intervening decidua, from the uterus to the placenta; nor has the appearance of the orifice of a vessel been discovered, even with the help of a magnifier, on the uterine surface of the placenta. This surface of the placenta deprived of the deciduous membrane presents a mass of floating vessels, its texture being extremely soft and easily torn; and no cells are discernible in its structure, by the minutest examination.

At that part of the surface of the uterus to which the placenta has been adherent, there are observable a great number of openings leading obliquely through the inner membrane of the uterus, and large enough to admit the point of the little finger: their edges are perfectly smooth, and present not the slightest appearance of having been lacerated by the removal of the placenta. In some places they have a semilunar or elliptical form, and in others they resemble a double valvular aperture. Over these openings in the inner membrane of the uterus, the placenta, covered by deciduous membrane, is directly applied, and closes them in such a manner that the maternal blood, as it flows in the uterine sinuses, cannot possibly escape either into the cavity of the uterus, or into the substance of the placenta. The above appearances on the inner surface of the uterus have been accurately represented, by Røderer; from whose work, fig. 1. of Plate I. is taken.

When air is forcibly thrown either into the spermatic arteries or veins, the whole inner membrane of the uterus is raised by it; but none of the air passes across the deciduous membrane into the placenta, nor does it escape from the semilunar openings in the inner membrane of the uterus, until the attachment of the deciduous membrane to the uterus is destroyed. There are no openings in the deciduous membrane corresponding with these valvular apertures now described, in the internal membrane of the uterus. The uterine surface of the placenta is accurately represented in fig. 2. Plate I.

If a placenta be examined which has recently been separated from the uterus in natural labour, without any artificial force having been employed, its surface will be found uniformly smooth, and covered with the deciduous membrane; which could not be the case did any large vessels connect it with the uterus. The placenta in a great majority of cases is also detached from the uterus after labour, with the least imaginable force; which would be impossible if a union by large blood-vessels, possessing the ordinary strength of arteries and veins, actually existed. Besides, a vascular connexion of such a kind would be likely to give rise, in every case, to dangerous hæmorrhage subsequent to parturition, a circumstance not in accordance with daily experience.

Noortwyck, Røderer, Haller, Dr. W. and Mr. J. Hunter, and Dr. Donald Monro, do not appear to have examined the gravid uterus and its contents in the natural state of the parts, but after fluids had been forcibly injected into the hypogastric and spermatic arteries. The laceration of the deciduous membrane covering the orifices of the uterine sinuses followed this artificial process, as well as the formation of deposits of injection in the vascular structure of the placenta, giving rise to the deceptive appearance of cells. That this took place in the exami-

nations made by Ræderer* and Monro†, does not admit of dispute; and the following facts render it more than probable that the Hunters were also misled, by the effects of artificial distention of the placenta, from the extravasation of the fluids forced into the uterine vessels.

In the course of last autumn the preparations of the gravid uterus in the Hunterian Museum at Glasgow were examined at my request by Dr. Nimmo, and in none of them does it appear certain that any great blood-vessels pass from the uterus into cells in the placenta; but in many the deposits of injection, causing the appearance of cells, were observed evidently to be the result of extravasation. No preparation in the collection seems to have been expressly made for the purpose of proving or disproving the fact, that the deciduous membrane passes over the uterine surface of the placenta; but in reference to preparation R. R. No. 139, it is observed by Dr. Nimmo that no vascular openings are visible in the membrane interposed between the uterus and placenta.

No. 178, "is a small section of the uterus with the veins injected green, and broken off where they were entering the placenta." The surface of the injected matter is smooth; the edges of the openings defined and quite unlike ruptured vessels; their form in general elliptical, seeming as if they were holes cut in the side of a convolution.

No. 125. "A portion of uterus and placenta, the latter injected from uterine vessels." There is an opening which seems to be natural, corresponding to one of those in the uterus; but the majority of those whereby the injection has passed into the placenta seems to be mere lacerations.

No. 101. "A section of uterus with veins injected black, and the injected matter protruding by irregular plugs into the cavity of the uterus." The holes are semilunar and elliptical, with defined edges, and nothing resembling the continuation of vascular tubes to be seen.

R. R. 121, is described in the printed catalogue as follows: "A small portion of placenta and uterus where the cells of the placenta have been injected from the veins of the uterus. The veins are seen very large, entering the substance of the placenta."

Dr. Nimmo makes the following observations on this specimen: "This preparation seems to be most in point. I would describe it differently. The cellular substance of the placenta has certainly been filled from the uterine vessels. These, however, instead of passing directly into the placenta, are distinctly seen applying their open mouths to the membrane of the placenta, where the

injection in some instances stops. The membrane is thinner here than where no vessels are applied, consisting, so to describe it, of one layer, while a second layer covers all other parts. Where the injection has passed into the substance of the placenta, it has evidently been forced to the side between the layers, and found some weak point, whereby it has entered into and been diffused throughout the cellular texture of the placenta."*

In the Museum of the Royal College of Surgeons of London, there is a preparation of the uterus with the placenta adhering to the inner surface, which is supposed to have been put up by Mr. Hunter himself nearly fifty years ago. The vessels both of the uterus and placenta have been filled with injection, and the parietes of the uterus, placenta and membranes, have all been divided by a vertical section into two nearly equal portions. By permission of the Board of Curators, I have been enabled to examine one of these portions, and to have a drawing of it made. In the interstices of the muscular fibres I observed the veins of the uterus, which ran in great numbers towards the part where the placenta adhered. They were of an oval form, their long axes being in the long axis of the uterus. The muscular fibres ran longitudinally from the fundus to the os uteri. (Plate II.)

The deciduous membrane was everywhere covered with minute, tortuous blood-vessels proceeding from the inner surface of the uterus, and filled with injection. There was no appearance of vessels of any magnitude passing between the inner surface of the uterus and placenta; but flattened portions of injection were observed in this situation, having in many parts the form of thin layers, which had obviously escaped from the orifices of the uterine veins. Elsewhere the injection had lacerated the deciduous membrane, and formed deposits in the vascular part of the placenta.

The facts which have now been stated warrant, I think, the conclusion, that the human placenta does not consist of two parts, maternal and foetal, that no cells exist in its substance, and that there is no communication between the uterus and placenta by large arteries and veins. The whole of the blood sent to the uterus by the spermatic and hypogastric arteries, except the small portion supplied to its parietes and to the membrana decidua by the inner membrane of the uterus, flows into the uterine veins or sinuses, and after circulating through them, is returned into the general circulation of the mother by the spermatic and hypogastric veins, without entering the substance of the placenta. The deciduous

* *Icones Uteri humani, Observationibus Illustrate.* J. G. Ræderer, 1759.

† *Essays and Observations, Physical and Literary*, read before a Society in Edinburgh, 1754, vol. i.

* My friend Samuel Broughton, Esq. F.R.S., during a recent visit to the Hunterian Museum at Glasgow, examined the preparations of the placenta and uterus at my request, and authorizes me to say that his observations fully confirm the accuracy of Dr. Nimmo's statements.

membrane being interposed between the umbilical vessels and the uterus, whatever changes take place in the foetal blood, must result from the indirect exposure of this fluid, as it circulates through the placenta, to the maternal blood flowing in the great uterine sinuses.

The following opinions shew what slender claims our author has to originality :—

“ I would repeat with Madame Boivin,” says Professor Velpeau, “ that in many women who have died pregnant, the membrane which covers and unites the lobes of the placenta appears to me to be the only bond of union between this body and the uterus.”

“ I have searched, but in vain, in a great number of subjects, for the utero-placental vessels, and the state of parts has convinced me that if they exist sometimes, they are more frequently wanting. Every time that I examined the ovum in the uterus, after the third month, I can state that its whole surface, as well as that of the womb, was smooth, and that no vessel served to maintain both these parts, one with the other. Have the authors whom I have cited, been deceived by some anomaly, pathological disposition, or by some false appearances? But have I myself been deceived? The future and new facts can alone resolve this question, so that I abandon it to other observers.”—*Traité Élémentaire de l'Art des Accouchemens*, &c. t. i. 1829.

M. Breschet draws the following conclusions from the experiments which he has instituted :—

1st. That there exists on the placenta of some carnivorous animals, two circular bands of a green colour ;

2ndly. That chemical analysis has proved identity of composition between this colouring substance and the green colouring matter of the bile ;

3rdly. That this identity is another proof in favour of the analogy of the functions of the placenta and of the liver during intra-uterine life ;

4thly. That these two organs ap-

pear to form a little apparatus of hematosiis in the foetus, and that this colouring matter of the placenta, or that of the bile itself, already recognized in the blood by many chemists, leads us to believe that this fluid is necessary to hematosiis and to the support of foetal life, by giving to the blood the qualities necessary for that support.

M. Breschet's essay is one of great interest in a physiological point of view, but we must consider that his opinions require further confirmation.

This theory of M. Breschet will serve to illustrate the power and amazing fertility of a Frenchman's imagination ; although his foundation, his *data*, are somewhat of the most meagre, he contrives to build a superstructure, which overtops the clouds, *usque ad sidera*. Because he finds some green bands in the placenta of certain carnivorous animals, and this green is analogous, chemically, to the green colouring matter of bile, he forthwith argues, that the placenta and liver during intra-uterine life are analogous in function, and that, then, they form an apparatus of hematosiis, and thus M. Breschet discovers the longitude !!! *Mirabile dictu!*

Observations on the Healthy and Diseased Properties of the Blood. By W. STEVENS, M.D. 8vo. pp. 504. London. 1832. Murray.

DR. STEVENS has the merit of contributing to the revival of the humoral pathology, or rather the pathology of the blood, and satisfactorily shews that the vital fluid, in common with all the constituents of the body, is liable to disease. He properly combats exclusive solidism, and observes, that the doctrines of Cullen and Broussais are now looked on with suspicion. He states that “ it is only in the present day that animal chemistry has assumed a sober aspect, or been usefully applied in the treatment of disease.” “ It is also more

than probable that the physician, who is acquainted with the true cause of the redness of the vital stream in its healthy state, and of its darkness in disease, will be more likely to restore this fluid to its original colour, when it becomes black, or its healthy properties when it becomes deranged, than the mere solidist, who adopts a philosophy that is only applicable to rigid tubes, whilst both in his theory and practice he forgets that there is either blood, or any other fluid, in the living body, and dreams from first to last of nothing but 'sympathy,' 'the nervous system,' or increased action in the 'internal surfaces of mucous membranes.'" This stricture is just, though we should like to know, who is the physician acquainted with the true cause of the redness or darkness of the blood. We are of opinion, that the exclusive solidist and humorist are wrong, and never can succeed in curing fevers by their peculiar methods. Man is a compound of tissues and functions, all intimately cemented and interwoven with each other, all deranged in malignant fevers, and all requiring rectification. We agree with Dr. Stevens, that "the blood is black and diseased in the last stage of all those fevers that are speedily fatal," but we consider this the effect and not the cause of these maladies: this is the general opinion. Dr. Clanny has shown that the blood, in the first and second stage of typhus, is not deteriorated, and if it was, recovery could seldom happen, as no treatment suited to such a condition of the vital fluid is employed. Repeated experience proves, that typhus is successfully removed without saline medicines, and therefore we need not depend on them alone.

Dr. Stevens informs us, that he, during twenty years, had too many opportunities of observing the fatality of the destructive fevers of hot climates; that these supervened while the sufferers were affected with mercurial salivation; and he is of opinion that "mercury in any form is not

an antidote to the febrile poisons." After another reference to Cullen and Broussais, he consoles himself with the reflection, that the treatment he proposes "is more mild, and infinitely less pernicious, than the present bold, but unscientific, practice which is still but too commonly used in the treatment of fevers in the Western world."

Our author was attracted to the present inquiry by witnessing the fatality of fever in the island of St. Thomas, during the hot months in 1827. Facts induced him to alter his treatment, and to adopt a method essentially different. Tropical fevers are not preceded by nervous impressions, or produced by inflammation of the brain or stomach, "for often the nervous system is not affected until after the attack; and in certain fevers of a most malignant character there is no crust on the blood; whilst in these, as in cholera, in place of inflammation, there is, in the first stage, a want of circulation, not merely in a part, but in the whole system, which is directly the reverse of inflammatory action. But every drop of the blood is deranged even before the attack, and after this every fibre is affected, whilst the brain and all the organs are under the influence not always of organic, but invariably of functional disease. Neither can we cure these fevers either by a nervous impression, or by the mere reduction of increased action, for we are only successful when we attend to the diseased state of the vital current, as well as to the solids, and use, at a proper period, those active remedies that produce their effects, not merely on a part, but first on the blood itself, and then on all the solids in the system, through the medium of this their nutritive fluid." Our author observes, that some fevers are so fatal as to defy all remedies, or, in other words, that he does not profess to cure all cases by saline medicines. He states that he may modify some of his opinions, but the facts he has

adduced are based on truth, and cannot be overturned.

Such are the leading points treated of in the preface.

(To be continued.)

STATE OF MEDICINE IN IRELAND.

WE copy the following extracts from the work of Sir Jonah Barrington as a splendid specimen of the incredible nonsense which might be palmed upon the English nation forty years since, which will even now be palatable to many well minded novel readers, but which no medical man of education in Christendom can believe, though attested by the personal testimony of this second Munchausen. Our voracious narrator has been an eye witness to the partial flaying of a new born infant, has seen the flesh cut down to the bone, the muscles and bone black, and the operation performed by a regular surgeon. It unfortunately happens for the truth of this fable, that a Dease, a Richards, a Rooney, a Colles, practised at the time of the performance of the operation, and that then, as now, the eminent Dublin practitioners were and are consulted in all difficult and singular cases which occur among the respectable portion of society in the provinces. It would be an outrage on common sense to suppose that the medical profession of Ireland, with their University, Colleges of Physicians and Surgeons, could be so illiterate and ignorant as to possess a member who would attempt to perform such a barbarous operation as we are about to describe. Had it been referred to some remote period in the ancient history of Ireland, it would be more feasible. But we must hasten to place this precious narrative before our readers.

SKINNING A BLACK CHILD.

A NOT unpleasant, because not fatal, incident may serve to illustrate the "state of medicine and surgery," between forty and fifty years ago, in

Ireland. It occurred near my brother's house, at Castlewood, and the same Lieutenant Palmer, of Dureen, was a very interested party in it. * * The lieutenant having been in America, had brought home a black lad as a servant, who resided in the house of Dureen with the family. It is one of the mysteries of nature that infants sometimes come into this world marked and spotted in divers fantastical ways and places, a circumstance which the faculty, so far as they know any thing about it, consider as the sympathetic effect either of external touch or ardent imagination;—or, if neither of these are held to be the cause, then they regard it as a sort of *lusus* * * *

The father and uncle decided calmly and properly to lay the whole affair before a consultation of doctors, to know if it was not a regular *imagination mark*. * * *

All the doctors in the neighbourhood were called in to the consultation. Old Butler, the farrier (heretofore mentioned), came with all expedition to Dureen, and begged leave to give his opinion and offer his services, wishing to see Master Washington before the doctors arrived, as he had a secret for turning any skin ever so brown as white as milk.

On seeing Master Washington, however, he declared he was *too* black *entirely* for his medicines, or any body else's. * * *

The first point stated and unanimously agreed on, was "that the child was black." The reasons for that colour being universal on the young gentleman were not quite so clear. At length, Dr. Bathron finding he had the lead, * * * declared with great gravity that he had read many authors upon the subject of *marks*, and could take upon himself positively to assert that the child was (according to all authority on such matters) a *casus omissus*. The others, not being exactly sure either of the shape, size, or colour, of a *casus omissus*, thought it better to *accede* to what they did not *comprehend*, and all

subscribed to the opinion that the child was a *casus omissus*. * * *

Dr. Bathron, however, having, by search of old book-stalls in Dublin (whither he went for the purpose), found an ancient treatise, translated from the work of the high German Doctor Cratorius (who flourished in the fourteenth century), on *skinning* certain parts of the body to change the colour or complexion, or effectually to disguise criminals who had escaped from prison;—by which means, likewise, disfiguring marks, freckles, moles, &c. might be removed,—decided, that if this could be done partially, why not on the entire body, by little and little, and not skinning one spot till the last should be healed? He, therefore, stated to Mr. Washington, and all the good family of Dureen, that he would take upon himself to *whiten* the child,—as he was perfectly satisfied the black skin was merely the outside, or scarf-skin, and that the real skin and flesh underneath were the same as everybody else's.

The mode of operating was now the subject of difficulty. It was suggested and agreed on, to call in Mr. Knaggs, the doctor of Mount Meleck. * * *

The state of practice in Ireland suggested but two ways of performing this notable operation,—one purely surgical, the other surgico-medical; namely, either by gradually flaying with the knife, or by blisters.

Most people inclined to the blister, but the doctors conceiving a blister might not rise regularly, and would, in that case, leave the child piebald, determined as a first experiment, to try both. Accordingly,

A strong blister, two inches by three, was placed on the child's right arm, and being properly covered, remained there without inflicting any torture, for above an hour. The left arm was reserved for the scalpel and forceps, and the operator entertained no doubt whatever of complete success.

The mode he pursued was very

scientific; he made too parallel slashes as deep as he could in reason, about three inches down the upper part of the arm, and a cross one, to introduce the forceps and strip the loose black skin off, when he could snip it away at the bottom, and leave the white or rather red flesh underneath, to generate a new skin, and show the proper colouring for a god-child of General Washington.

All eyes were now riveted to the spot. The women cried in an under key to Master George, who roared. "Hush, hush, my dear," said the doctor, "you don't know what's good for you, my little innocent!" whilst he applied the forceps, to strip off the skin like a *surtout*. The skin was tight, and would not come away cleverly with the first tug, as the doctor had expected; nor did any thing *white* appear, though a sufficiency of red blood manifested itself.

The doctor was greatly surprised. "I see," said he, "it is somewhat deeper than we had conceived. We have not got deep enough." Another gash on each side; but the second gash had no better success. Doctor Bathron seemed desperate; but conceiving that in so young a subject, one short cut—be it ever so deep—could do no harm, his hand shook, and he gave the scalpel its full force, till he found it touch the bone. The experiment was now complete; he opened the wound, and starting back, affected to be struck with horror, threw down his knife, stamped, and swore the child was in fact either the devil or a *lusus naturæ*, for that he could see the very bone, and the child was actually coal-black to the bone, and the bone black also, and that he would not have taken a thousand guineas to have given a single gash to a thing which was clearly supernatural,—actually dyed in grain. He appeared distracted; however, the child's arm was bound up, a good poultice put over it, the blister hastily removed from the other arm, and the young gentleman, fortunately for Doctor Bathron, recovered from the

scarification, and lived with an old dry-nurse for four or five years. He was then killed by a cow of his father's horning him, and died with the full reputation of having been a devil in reality, which was fully corroborated by a white sister.—*Sir J. Barrington's Memoirs.*

M. DUBOURG, D.M.P.

ON THE ANTIPHLOGISTIC TREATMENT
OF CHOLERA.

A FEW days after M. Broussais had delivered his lectures on cholera, I met M. C. a gentleman, 35 years of age, going to the Palais de Justice, about ten in the morning; he complained of dull pains in the abdomen, and diarrhoea of three or four day's duration. I advised him to return home directly, to keep on low diet, and apply leeches to the anus. About three or four in the afternoon, I was sent for in a great hurry to visit M. C. whom I found in bed, with all the symptoms of the *Cholera Algide*. The leeches had been applied to the anus, but the rice water evacuations, the vomiting, of the same nature, the state of the eyes, the tongue, the sepulchral voice, the pulse almost gone, demanded speedy and more energetic measures. It should be added, that the abdomen was so painful, that the pillows which were applied to warm him, could not be borne. Frictions, with hot irons, were made on the spine, according to Petit's plan, and were directed to be renewed in two hours; 30 leeches were applied to the abdomen, and sinapisms to the arms and legs. The body was cold; the pulse so weak and the insensibility of the skin so great, that the patient did not feel the leech-bites, which yielded very little blood; the thirst was extreme, urine completely suppressed, the vomiting increasing, in a word, cholera was very well marked. Pieces of ice were given to the patient every now and then, and were very palatable. The circulation and heat gradually returned; the leech-bites

were kept constantly bleeding; syncope, which occurred several times, was remedied by a few drops of ether and orange flower water, and by making the patient smell to vinegar. When, in spite of poultices, the leeches furnished no more blood, fresh ones were applied. The progressive amelioration emboldened me. For 36 hours, the ice and leeches were continued, with very short intervals; at the end of three days reaction set in so violently, and the face became so injected, that I was obliged, in order to prevent the congestion then threatening the brain, to bleed him twice from the arm. At the end of ten days, M. C. was completely convalescent, thanks to this active treatment, which, however, I would have not dared to employ at the commencement of the Parisian epidemic.

Journal Hebdomadaire.

SOCIETY OF MEDICINE, PARIS.

ON DIABETES MELLITUS.

M. GASC read the history of a case of *diabetes mellitus*, occurring in the wards of the Military Hospital, Val-de-Grace, under M. Delmas. He also narrated the analysis of the urine made by M. Serullas.

M. Nacquart narrated the case of a lady affected with diabetes, and who was in a state of extreme marasmus; the skin, however, preserved its natural appearance, being neither pale nor earthy as it is in extreme organic disease. The quantity of urine evacuated doubled the quantity of fluids taken; it was colourless, and sweet; an exclusively animal diet soon restored her to health. The urine was analysed by M. Chevallier, a chemist, who found it to contain sugar perfectly crystallizable, at least as much so as it generally is in diabetic urine.

M. Guibourt was of opinion that there was some mistake in speaking of the sugar in M. Delmas' case; it was said to be crystallizable, whereas the sugar of diabetic urine is not crystal-

lizable; it is soft like that of the grape.

M. Gasc replied, that the sugar was not crystallized; it had the consistency of thick syrup.

M. Gaultier de Claubry remarked, that while some physicians were curing diabetes by a tonic animal diet, others, as Pinel, who mentions it in his *Nosographie*, have succeeded in effecting a cure by sending the patient to the country, nourishing him with fresh vegetables, asses milk, &c.

M. Delmas' case was then sent to be examined by a commission, composed of MM. Prus, Mérat, and Nacquart.—*Transactions Médicales*.

ACCOUNT

OF AN

EPIDEMIC SWEATING SICKNESS,

(SUETTE MILIAIRE,)

In the Department of L'Oise.

BY P. MENIERE, D.M.P.

(Continued from Page 784.)

IN 1821 the sweating sickness was very prevalent at Caugigny, and twenty-three deaths took place. The fatal termination occurred later in the disease than during the present epidemic, the patients generally dying from the supervention of gastro-intestinal inflammation; they are now dying in the commencement of the attack, or at the period of the miliary eruption. They suffer from extreme anxiety, and painful convulsive tension along the spine, somewhat similar to that which is observed in tetanus. Some vomit or rather spit a great deal of frothy blood. In regard to those who survive this attack, and they are few in number, convalescence is always very long, and the digestive organs recover their tone with difficulty.

The village of Château-Rouge, distant some hundred yards from Caugigny, had many cases of this affection without the miliary eruption. There also the most powerful men appeared to be more readily attacked by it than the weaker. There were also there several families, all the members of which were successively taken ill, another example of that local infection, which has been mistaken for a proof of direct contagion, which its most sturdy defenders are beginning to doubt.

The commune of Olly-Saint-Georges con-

tains 1,300 inhabitants. The village of the same name, situated in a low, humid place, has had 160 sick, and 9 deaths. Here also choleric symptoms rapidly succeeded those of the suette. Pulmonary congestion had been here formerly, as at Caugigny, the most marked sign; but now gastric symptoms predominated, and death was speedy.

At Mouy, a small town having 2,000 inhabitants, situated on the Thérin, a little river which traverses diagonally a great part of the department, and empties itself into the Oise a little below Creil, a sudden elevation of the temperature produced 200 cases of this miliary epidemic in one day. The thermometer rose to 84° Fahrenheit, and this sudden heat, accompanied by storms, produced the same effect as at Nouailles and Cyr-lès-Mello. Four persons died in a few hours in spite of the assistance of MM. Mabile and Baudot, physicians at Mouy, both of whom had witnessed the epidemic of 1821. In some cases, recovering from the suette, we met with typhoid symptoms, stupor, emaciation, petechiæ on the abdomen, pulse frequent and soft, tongue red, coated in the centre and at the base, typhoid state of the intestines, fœtid breath, and other signs of a serious lesion of the gastro-intestinal apparatus. In one of these cases all the symptoms dispersed, on the appearance of an enormous swelling of the parotid. It is the only case of the kind which has been seen, either by the commission, or the medical men of the department, during the present epidemic.

Out of 1,400 inhabitants in the commune of Bury, at half a league from Mouy, there occurred almost at once 120 cases, of which five died in one day. It must be added in truth that of these five one only died from the suette; the others fell victims to the cholera, which has invaded several houses with frightful rapidity. Families of shepherds, surrounded by sheep-folds, and large dung-hills soaking with water, and in a state of decomposition, badly fed, badly clothed, and most disgustingly dirty, have been attacked by these two scourges at once, and have almost all perished. Among these unhappy victims of extreme ignorance and negligence, the miliary eruption was very much developed, and in consequence of the thickness of the epidermis retaining the fluid, it formed bullæ, which soon became purulent.

The commission then left Mouy and went to Clermont and Creil. The country through which they passed was elevated, very dry, and well cultivated. The suette shewed it there as in 1821, in the same villages, the same houses, and often on the same individuals; nevertheless, it has not been so fatal as in the places already mentioned, and the number of deaths has been very small.

In regard to Creil, which is situate on the Oise, and which contains 1,500 inhabitants, for the most part employed in manufactories, the suette has scarcely shewn itself, except by

a few unimportant symptoms. Some redness of the skin, accompanied by abundant perspirations, and very unpleasant palpitations in the epigastric region. This either gave way entirely, or its place was taken by the cholera, which has proved very fatal, in spite of active medical and hygienic treatment.

About a league distant from Creil, on a height which borders the extensive park of Chantilly, is situate the village of Aspremont, which contains scarcely 600 inhabitants, of which 200 were ill. Twenty-two deaths had already taken place, and many of those seen by the commission were evidently dying. There is no appreciable cause of insalubrity in this village. Here, as elsewhere, the cholera succeeded the suette, and was much more dangerous, inasmuch as it was acting on persons already under the influence of a morbid cause. This unhappy complication hurried the fatal termination, and more especially as at first assistance could not be procured. If our readers figure to themselves a third of the population sick, robust men and mothers of families suddenly carried off, whole families sinking under the weight of the evil, they will have some idea of the consternation which reigned in this unfortunate village.

Further on, at Senlis, for example, the cholera alone was devastating the town, and there it appeared to be more serious even than at Paris.

This disease (the sweating sickness) appeared at once in all the communes comprised between Pouilly, Beauvais, Clermont, Pont St. Maxence, L'Oise, and Chambly, as far as Mery. The places principally attacked are Mouy, Cauvigny, Bresles, Ercuit, Bornel, Belléglise, Neuilly en Thelle, Sainte Genevieve, &c. About eighty communes, within two or three days, have had 5,000 sick. It has been already seen with what rapidity the disease has changed, or rather given way to a more powerful epidemic influence. It was in the midst of these circumstances that the commission arrived.

To what cause is the appearance and return of the suette miliaire in ancient Picardy to be attributed? Since the epidemic of this kind observed at Abbeville in 1718, to that of 1821, which was examined by M.M. Pariset, Bally, François, Mazet, and Rayer, various others have occurred in all parts of this country. Various authors have endeavoured to find its cause, and have attributed it to marsh malaria and bad food.

The first of these causes cannot be admitted. With the exception of the village of Olly Saint Georges, the places attacked are so situated far from marshes, and the rivulets which traverse the low meadows are so banked (*encaissés*) as to render an overflow impossible. And besides, the suette does not appear to attack the inhabitants of low, humid dwellings, but rather seems to prefer those who are well lodged, well clothed, live comfortably, and are apparently capable of neu-

tralizing the action of marsh effluvia. The mayors of the communes, when the commission visited them, were for the most part convalescing, having been the first attacked. Women also were seized in greater number than men, and yet they are much less habitually exposed to the influence of malaria than the latter, so that it is not possible to admit, as M. Rayer does, the influence of emanations from marshy meadows and putrid matter.

In regard to bad food, it can only be looked upon as a general predisposing cause; it cannot be construed into a special cause any more than the preceding one, neither can any relation be established between it and the suette. A thousand other localities are in a similar condition, and even worse, without a similar result. Let us confess our ignorance.

We do not avow it equally in regard to the occasional cause; all writers are agreed on this point; elevation of the temperature, electric state of the atmosphere, have preceded the appearance of the disease. This relation once established, and confirmed, it remains to point out the connexion between the different phenomena of natural philosophy and human pathology, and the merit of this discovery, which has been so often sought for in vain by so many savans, we must leave to others.

The mode of propagation of the disease is also indicated to a certain point by the physical circumstances so well pointed out in the work of M. Rayer. Thus the direction of the winds, the inclination of certain valleys, manifestly prove the development of the disease, although, even in that, many exceptions are to be met with, which may invalidate this rule. It is with the suette as with the cholera, certain localities are spared even when they are in the exact course traversed by these scourges; some links of the chain are wanting, and the reason for such a divarication we cannot discover. And besides, if it must be said, these accidents in the propagation of the disease are of but secondary importance; they throw no light on the principal points of these great phenomena, and no advantage can be attained from them in practice. Contagion, in the real signification of the word, is no longer attended to; the popular good sense of the inhabitants of L'Oise has induced them to give up this ancient error. If so many sick were in want of assistance in the villages which were examined, it is not owing to the fear caused by the disease, but rather because there were but few healthy persons in each house. And then who can forget that misfortune renders one egotist, and the peasant with sick in his own house, forgets those in his neighbours? Hence the desolating scenes which were witnessed, whole families lying together pell-mell without a nurse, without a friend, to assist them in any way, or to soften their sufferings. Medical assistance was not wanting, but as

he was waited for by twenty patients, he could stay but a short time with any, and his prescriptions often were not executed for want of intelligent individuals to administer the remedies.

On examining carefully the ensemble of the phenomena of the suette, we were led to conclusions which, although they may not strike the reader as being correct, appeared quite natural to us who saw at once both the suette and the cholera. These two diseases succeeded each other sometimes very rapidly, and even immediately, in the same persons. The skin in one case, the gastro-intestinal mucous membrane in another, the internal and external integuments finally, were the seat of the disease, or at least the part in which the principal symptom shewed itself.

On the other hand, the epigastric and precordial pains of the suette, do not differ much from the pain of cholera, and the asphyxial symptoms so common in many cases. The analogy is too close to be altogether rejected, although a very important characteristic is wanting; in cholera, when the disease has a certain degree of intensity, the blood is extensively changed, which is not the case in the suette, even when it is very severe, and threatens the life of the patient; besides, also, there is nothing analogous to the pulmonary congestion in cholera.

From the co-existence of these two diseases, identity of determining causes may be inferred, but positive facts are required to prove that. It is not sufficient to know that the cholera arose in India, in the midst of the foetid emanations from a marshy soil; for, in admitting this fact, we do not prejudice in any way the other questions suggested by the history of this similar malady. It is the same in regard to the suette, the progress of which, on a much smaller scale, in its mode of development and propagation, is nearly similar. The causes of obscurity are numerous; they are to be lamented, as they prevent an exact appreciation of the therapeutic measures, the most proper for the occasion.

From Bellot, who wrote in 1733, to Tessier, who wrote 40 years later, the plan of treatment adopted against the disease, related to the ruling medical ideas of the period. A poison, a fermentation, was endeavouring to get away, and nature should be supported and assisted in this work, and the system freed from this noxious principle; hence the use of sudorifics, cordials, hot and exciting drinks, much clothing, &c.

All good observers have remarked the inconveniences of this plan, and therefore Tessier, Boyer, and the later practitioners have adopted one exactly contrary. General bleeding, at the commencement of the attack, has always been very advantageous, and at present is the most efficient remedy to simplify the case, and render a cure very probable. The rapid abstraction of a sufficiently large quantity of blood removes, in a great mea-

sure the oppression and the epigastric pain. The relief is prompt and constant; the heat diminishes; the nasal hæmorrhages, which are rather frequent, no longer occur; and that painful pricking sensation, which the patients suffer in the legs and hands, is no longer felt. The drinks should be as simple as possible, at a moderate temperature, and not too much, although the patients suffer occasionally very severely from thirst; during the night the insomnia may be combated by slightly sedative draughts. Gentle revulsives should be applied to the feet, the hands may be washed in mustard and water;—in a word, the appearance of the miliary eruption, which, in the majority of cases, causes a notable remission in the symptoms, is to be brought on as soon as possible.

When the tongue indicates a foul state of the stomach, with obstinate constipation, gentle laxatives may be given, either by the mouth or in enemata, without inconvenience; they may be had recourse to, without fear of increasing the diaphoresis, for experience proves that they act almost entirely on the gastro-intestinal mucous membrane, without re-acting on the cutaneous surface.

If one of those serious cases is met with, where pulmonary congestion threatens the life of the patient, a large opening must be made in the vein, and a large quantity of blood abstracted, and energetic revulsives had recourse to. But the bleeding must be particularly attended to, as more than one patient has died immediately after too rapid depletion. It has been seen that the nervous system is affected in a remarkable manner, and we have to fear fatal collapse, if too much blood be taken or too rapidly; the prudent physician will attend to the powers of the patient, and the nature of the predominating symptoms, in abstracting blood.

As soon as the eruption appears, the treatment will consist in a strict observance of the rules of hygiene; for the majority of cases are then convalescent. Those, however, who have but a slight eruption, must be particularly watched, as a second, and even a third crop may make its appearance, and this will be accompanied with initiatory symptoms. In such cases, less food must be given, and the patient kept longer in bed, or to a room.

Bleeding, which is very useful at the commencement of the attack, is no longer so when the eruption has come out. Many persons, in whom a vein has been opened at this period to relieve excessive dyspnoea, have soon perished. Excess in diet is exceedingly hurtful at this time. At Bury, a young robust woman, was desirous of eating, and got up when the eruption had scarcely terminated; she was soon seized with shiverings, fits of syncope, and expired in the course of the day.

During convalescence great attention is requisite. When cerebral symptoms appear,

as they almost always did at Nouailles, external derivatives, laxative glysters, leeches to the anus, or to the mastoid processes, should be had recourse to. If, on the contrary, as at Cauvigny, the lungs are threatened, general and local bleedings, a large blister to one thigh, and appropriate drinks, should be employed. In all cases the practitioner must pay attention to the particular circumstances which occur, and after having generalized the disease so as to seize the principal indication, he must individualize the patient, that is to say, he must modify the treatment according to his particular state, constitution, idiosyncrasy, &c. This wise precept of Hufeland's ought to be always present to the mind of the physician.—*Archives Générales de Médecine*.

DR. GRAVES

ON THE

TREATMENT OF GASTRODYNIA.

SEPT. 1828. Rev. I. D——y, æt. 36, rather corpulent, of temperate habits, has suffered for three years from violent attacks of *gastrodynia*. They last sometimes for forty-eight hours, and during their continuance the agony is described to be so great as to make even death a desirable boon. The symptoms during an attack are—sensation of straitness in the stomach, with exquisite unintermitting pain, the pain shooting into both *hypochondria*; dry retching, and rejection of every kind of food and medicines; the countenance, during the attack, pale and expressive of distress. He is not able (although his sufferings make him very attentive to this point) to trace any connexion between his complaint and different kinds of food. The attacks usually seize him in bed, sometimes set in at once with great intensity, at other times commence with comparative mildness, progressively increase in intensity, and then disappear gradually in the same manner as they came on. He is rendered somewhat more liable to an attack by confinement of the bowels, and feels relieved after full evacuations; the agony suffered until these are procured is extreme, and even then the

relief comes but slowly, and always leaves an internal soreness about the *epigastrium*, which continues with very little diminution for weeks, and is always proportionate to the previous intensity of the pain. The average frequency of the attack is about one in every two or three months. He resides in the country, but during his present visit to town he has had one of his attacks, which gave me an opportunity of seeing him in it. It came on late in the evening, without any apparently assignable cause, the pain, as he had in his previous account of some of the fits described it, being at first slight, but steadily increasing in intensity, accompanied with great anguish, rejection of every thing from the stomach, and frequent retching; the eyes were watering, countenance pale, and expressive of great suffering. The previous history leading me to view the disease as arising from morbid sensibility of the nerves of the stomach, I had determined, should an opportunity offer while the patient was under my immediate observation, to exhibit opium. I should, perhaps, have observed, that all the preceding attacks had been treated in the country by bleeding or leeching, purgative medicines, and enemata. I gave him fifteen drops of *tinct. opii* in half a glass of tepid water, without an admixture of any of the stimulants or aromatics, as ether, *foetid tincture*, &c., which are frequently, but, I believe, injudiciously, in many cases added to opium, under the supposition of increasing its virtues. In a few minutes after taking the draught the stomach became settled, the pain was checked in its progressing intensity, and soon after began to die away, leaving behind it a very trifling soreness, which had nearly quite disappeared on the following morning. This was the occasion on which he had passed through an attack in this manner.

From the date of the above observations, Sept. 1828 to July 1831, I had frequent opportunities of seeing this gentleman, and he never, during

that space of time, experienced any symptom of relapse. Since July 1831, I have not seen him, but I may be almost certain, from his silence, that he has continued to enjoy the same immunity up to the present May 1832.

Concerning alkalies I may remark, that the liquor potassæ causticus, although not so well suited to be used as a domestic medicine, is much preferable to magnesia in relieving acidity and heartburn.

Cure of Chronic Hydrocephalus by Puncture.

A BOY who from his birth had had his head largely developed, but was otherwise well, was brought to the clinical hospital of Berlin. He was aged four months, pale but not emaciated. The head had the peculiar stamp of chronic hydrocephalus, the face was small in comparison to the skull; the hair was scanty, fair, and delicate; the fontanelles largely open; the sutures gaping; the bones of the skull moveable, thin, but slightly ossified. In its greatest circumference the skull was $18\frac{1}{4}$ inches,* (German): fluctuation was every where evident, particularly over the anterior and posterior fontanelles; and when one of the fontanelles was pressed on, a hard and translucent tumour was produced at the other. All other curative means being ineffectual, M. Graæfe resolved to puncture. He compressed the greater fontanelle, so as to render the lesser tense, and then plunged a pretty large cataract needle at first vertically into the fontanelle, near the osseous border, and then turned it obliquely for half an inch. The viscid liquor issuing only drop by drop, the operator withdrew the needle and introduced a very fine curved trocar; as soon as the canula was opened a strong jet of a yellowish brown

transparent liquor came away. And half a minute the canula was closed, and re-opened at the end of a few minutes; this was repeated several times, and the skull gently compressed with the hands applied on the sides. When 3 xii of fluid had been abstracted, the eyes of the child suddenly became dull, the pupil small, the face altered, and the pulse weak; the canula was then withdrawn, the wound closed, and the head compressed by bandages. These unpleasant symptoms were removed after some hours by stimulants, but the child remained restless or disturbed for a few nights. The same train of symptoms supervened after each of the subsequent punctures, which were not undertaken until the child had been perfectly restored, (at intervals of from 10 to 14 days.) After each puncture the diameter of the head diminished by two or three lines. By degrees the dimensions of the skull became proportioned to those of the face and the body in general; the fluctuation and the mobility of the bones of the head diminished; the sutures closed, and the general health became much improved. The puncture had been repeated eleven times in the year 1822, viz. the 8th, 15th, and 23rd of January, 19th of February, 15th and 29th of March, 19th and 27th of April, 5th and 27th of May, and 23rd of June. After the last puncture the fluctuation was no longer evident, the small fontanelle and all the sutures were closed, the larger fontanelle alone remained slightly open. After the ninth puncture he began to articulate some words and walk, and at the age of ten months could walk and articulated distinctly. At the end of June, the head, measured at its greatest circumference, gave $18\frac{3}{4}$ inches. The 26th November, 1830, the child, aged $2\frac{1}{2}$ years, was shown to the Society of Medicine of Berlin.—*Graæfe's and Walther's Journal für Chirurgie und. Augen Heilkunde*, 1831. B. 15. p. 3. *Düb. Journ. of Med. and Chem. Science.*

* There must be a mistake here in the memoir. See the measurement afterwards given as the circumference of the head after the recovery of the child.—R. J. K.

*Furious Delirium, consequent on the
Repercussion of Erysipelas, cured
by recalling the Inflammation.*

A MAN, aged 45 years, was wounded the 24th November last in the thigh by a stabbing instrument, which penetrated four inches, and grazed the femoral artery without injuring it. M. Blandin found him in the following state: face red, pulse 100, headach; the edges of the wound red and painful; he was bled and put on low diet. The next day but one his state was very alarming; face red, pulse 130, look wild and stern; complete loss of intellectual faculties, furious delirium, violent movements of the limbs, &c. On interrogating his parents as to what had passed, M. B. learned that the thigh, in the situation of the wound, had become of a purple red some hours after his visit, with great heat and pain, and that they had applied on the part compresses dipped in cold water and vinegar; that under the influence of this treatment, the redness, and even the pain, had completely disappeared; and there remained but a slight yellowness in the part, and finally, that the cerebral symptoms came on suddenly afterwards with extreme violence. M. Blandin immediately bled him, applied twelve leeches behind the ears, sinapisms to the feet, a purgative injection, and friction with tartar emetic ointment, to the part which had been the seat of the erysipelas. The fifth day the inflammation returned, and extended over the internal and superior third of the thigh. The cerebral symptoms disappeared, and the patient complained only of headach and lassitude. The following days the erysipelas extended, and considerable fever set in; this was combatted by frictions with mercurial ointment, and in eight days the patient was completely recovered.—*Archives de Médecine.*

*Removal of Fungus *Hæmatodes* of the
Tongue by ligature.* By M. VON
GALOWSKI, of Wilna.

SUCH is the title affixed to the following case, but which we consider to be very inapplicable; the only reason why the tumour should be called *fungus hæmatodes*, is on account of the abundant hæmorrhages, and that will not warrant the use of the word *fungus*, which the disease was far from being, as it increased gradually in size, and did not present any of the characters of fungoid disease. At any rate it is certain that its extirpation was requisite, as it would otherwise have caused death by suffocation.—EDS.

A girl, 16 years old, had from her birth a small tumour, shaped like a bean, of a bluish colour, on the right side of the tongue near the root. This gradually increased in size to the seventh year, when it became stationary till the fourteenth, at which period it began to increase rapidly, and caused difficulty and even pain in speaking and eating. The catamenia then appeared, and its growth was again arrested; the patient was also relieved by the loss of about a pound and a half of blood from the *fungus*, in consequence of an injury inflicted by one of her teeth. In 1828 the tumour increased so rapidly that it was feared suffocation would take place during the night. At this time medical assistance was required. The tumour was situated about eight lines from the point of the tongue, extended to its root, and a space of only three lines was left between it and the palate. It was flattened from before backwards, and, in fact, moulded to the form of the mouth. The tumour was bluish in colour, soft, slightly elastic, and did not pulsate, the left side irregular. The actions of chewing and swallowing it was almost impossible to perform; speech intelligible, like that of a person who speaks with the mouth full. The disease was considered to be *fungus hæmatodes*. On the 30th of May, a strong ligature was passed through

the tumour, in order to draw it out of the mouth, and fix it in that situation, preparatory to its removal by the bistoury, but this intention was speedily abandoned, and recourse had to ligatures, in consequence of the violent hæmorrhage which supervened. A double silk ligature was then passed by means of a curved needle, through a healthy part of the tongue; they were then separated and tied. When they were drawn tight, the tongue inclined to the right, and a small quantity of blood continued to flow from the upper ligature. The tumour became of a darker colour, and lancinating pain was felt in the pharynx, jaw, and right temple. As it appeared that a small portion of the tumour had not been included within the ligatures, a third was applied, and their ends brought out and fastened to the cheek by plaster. Silence and rest were directed, ice was placed in the mouth, and a cold cataplasm to the cheek. The pain began to diminish some hours after the operation, but the tumour increased in size, and blood continued to flow from the upper ligature, which was accordingly tightened until it ceased. The tumour then became insensible, smaller, and moveable. The threads were tightened at first every second or third day, afterwards every day. Ice and acidulous drinks were given to remove thirst, while deglutition was difficult. On the second day severe inflammation set in on the right cheek and side of the tongue, which was treated by leeches, cold cataplasms, and emollient gargles. On the eighth, the tumour came away in a state of putrefaction. An oval body, of the size of a laurel-berry, was found in its centre, elastic, white, and brilliant; when divided it appeared to be composed of concentric layers of a horny substance, and contained one drop of a limpid, colourless liquid. Cicatrization took place at the end of three weeks. Until the wound was healed, the patient could not articulate distinctly the *h*, *l*, *t*, *g*, and *r*. The actual cautery was applied in June, as it appeared that a

small portion of the tumour had escaped the ligatures, and in a short time afterwards she perfectly recovered, but she remained incapable of projecting the tongue, and it always turned to the right, although there existed only a small depression of the edge of that organ.—*Journal der Chirurgie und Augenheilkunde, de Græfe et Walther.*

Case of Abscess Pressing on or Opening into the Vagina.

“ELIZABETH HUNT, a married woman, fifty-three years of age, was admitted a patient of the Northern Dispensary, under the care of Dr. Stroud, about two months before her death. During the previous four or five months she had suffered severe pains, first in her feet, afterwards a little above the right knee, and ultimately in the neighbourhood of the right hip joint. Her health was already much broken, and she was very feeble and emaciated. She was lame from the state, as supposed, of the hip joint. Her appetite was greatly diminished. Her sleep was disturbed, and she was the subject of a slight hectic fever. During the patient's first visit to the dispensary, she assigned no cause for her complaint except cold, and fatigue from laborious occupations. But during her second visit it was ascertained that, some months before, there had been a discharge of blood from the vagina, accompanied by a fainting fit, and that, subsequently to that period, blood had occasionally issued either from the vagina, or from the rectum. The alvine dejections were said to be contracted and of a flattened form. Under these circumstances an examination per vaginam was proposed, and with some reluctance permitted. Two fingers introduced into that passage, although with the greatest caution, gave much pain, and were withdrawn covered with blood. A hard round substance, supposed to be the uterus diseased and displaced, was found near the orifice of the vagina, project-

ing backwards in the direction of the rectum. On account of the tenderness of the parts, and the great weakness of the patient, a more accurate examination was deferred to a future opportunity. In the mean time the suspicion of a malignant disease of the uterus, which had been previously entertained, was now considered to be confirmed."

The patient died, and a very minute and unnecessarily prolix account of the dissection is appended. We may as well take this opportunity of protesting against the long list of nothingnesses which it seems the present fashion to cram into relations of cadaveric alterations. If disease of the uterus is to be described, the writer begins with the crown of the head, and tells of every thing healthy or unhealthy, natural or unnatural, that presents itself from that starting point till his arrival at the ultima thule, the sole of the foot. With laudable liberality all receives the same degree of attention, and whether we are told of the condition of the soundest organ, or of that which was chiefly diseased, the same amount of labour, and nearly the same amount of words is expended, and the weary reader wonders to which the author attaches most importance. It is really abominable that in order to learn the nature of a disease in a single organ or apparatus, one must wade through a dissertation on every other to be met with in the body. The case before us will be shewn to be one of psoas abscess, ulcerating into the vagina. Then what in the world can such information as the following be worth, or why should it be here unless to exhaust the reader's patience, and make him exclaim against morbid anatomists as absolute nuisances. "The cartilages of the ribs were very short, and the ensiform cartilage was extremely narrow. The heart was quite sound and contained recent coagula on both sides. The left auricle was rather large, and the right ventricle small. The venous trunks were full, and the arterial ones empty.

The coronary vessels, particularly the veins, were beautifully injected, embossing as it were the surface of the heart, with abruptly serpentine lines," and so on. What interest or utility can possibly attach to this? We might as well be amused with a geographical and statistical account of Peru, before entering on the description of a psoas abscess. We do protest most earnestly against such a system of case making and case taking, and when samples come before us we shall not fail to visit them with heavier censure than we deem it necessary to resort to at present. To pass to the principal pathologic features of the case—the right psoas muscle was found excavated by a very large abscess which extended outwards to the groin, and downward to the bottom of the pelvis, where it had formed one considerable opening into the vagina and another into the rectum. The cyst was filled with greenish pus and flakes of lymph, which had found their way into the vagina and rectum and prevented the escape of the pus. Some of these flakes were found quite putrid in the vagina. There was a small distinct abscess on the left side of the rectum and rather behind it. The cavity of the large abscess was traversed from above downward by the anterior crural nerve, which was entirely denuded, and at one point seemed contracted and almost reduced to a membrane, and above and below became suddenly large and dense. The bone at the sacro-iliac synchondrosis was denuded. The cellular tissue at the posterior part of the vagina, contiguous to the peritoneum was infiltrated with lymph and pus, the peritoneum presenting some adventitious bands. The posterior half of the vagina, immediately below the neck of the uterus, was destroyed by an ulcer an inch in breadth, by which it communicated laterally with the cellular tissue alluded to, and inferiorly with the rectum by an opening large enough to admit the thumb. The posterior lip of the orifice of the uterus was to a certain extent destroy-

ed by ulceration. The rectum at the perforated part was thickened, and the mucous membrane in front of it red and swollen. These are the essential particulars. The case was one of psoas abscess, and the changes about and in the parietes of the vagina and rectum were consecutive.—*Med. Chir. Rev.* July.

On the Oil called Palm Oil.

By HENRY M'CORMAC, M.D. Belfast.

THE palm oil of commerce, is obtained from the *Cocos butyracea*, which we are told is a native of Brazil. Now we find that the greater part, if not the whole of the palm oil in use, comes from the coast of Africa, by way of Liverpool and London. Then the *cocos butyracea* is either a native of Africa, which I take to be the case, or otherwise, the officinal palm oil of the Edinburgh pharmacopœia, is procured from the African palm. This I know to be the case, from having seen the plant and its oil upon the spot, up the river Sierra Leone.

It is stated in our dispensaries, that the palm oil tree furnishes a yellow succulent fruit, with a fibrous pulp, containing a hard cartilaginous kernel, which last, by grinding and maceration, furnishes the oil. I shall now state the real process by which it is prepared, from which it will be seen that an error must have crept into our accounts on the subject.

The palm tree growing on the coast of Africa, furnishes at the base or origin of its leaves, clusters of a yellow succulent fruit. Each of these bears some resemblance to a grape shot. The bunches are of different sizes, and the fruit composing them of different shapes, as might be expected from their reciprocal pressure, although naturally round, when not exposed to it. The pulp of this fruit is soft, and of a bright yellow colour—it is from this that the oil is obtained. Within it lies enclosed a

hard and thick-shelled stone, of a dark colour, within which is contained a firm white kernel of a pleasant oily flavour. This kernel also affords an oil, which is not yellow, but white—and not fluid, but concrete even in Africa. I need hardly say that the yellow palm oil is quite fluid while in Africa, and that it is not until it has been exposed to the cold of our temperate regions, that it becomes solid—whereas the oil of the kernel, as I have said, is always concrete or nearly so.

Both the white and the yellow oil are obtained by expression. The latter is procured in immense quantities in Africa, where it is partly consumed by the negroes along with their rice and pepper, or fried with their fish; and partly exported to Europe, where its principle use is in the manufacture of soap.

It continues to possess a pleasant fragrant odour for a long time after its extraction, and holds the same importance among the necessaries of an African, that olive oil does among those of an Italian or Spaniard. It affords an amusing spectacle to a new comer to witness a number of merry negroes squatting on their hams round a calabash of rice. They seldom use a spoon, but knead the grain into huge balls, which they roll over in a mixture of pepper, salt, and oil, and then pitch them with unerring aim and surprizing velocity into their mouths, whence they almost seem to descend unbroken into the stomach. The white oil is only used as an ointment for the skin, which it keeps nice and soft, while it at the same time prevents too great an excretion of perspiratory matter. Not content with the hue that nature had given them, I have sometimes seen fond mothers mix this oil with something like lampblack and rub their children over from head to foot, giving them a singularly lustrous appearance, especially in the sun.

The palm tree is one of the most stately in the African forest, towering above the rest, as the lofty pine

does at home over its fellow trees. Parrots are said to be fond of the fruit. I have seen it given to them after they were newly caught. Indeed the strong arched beak of this bird seems to render it peculiarly fit for tearing the fibres of fruit asunder. The preceding statement affords but a trifling addition to our knowledge, but as every thing helps to swell the great mass, I may be permitted to bring it forward.—*Glasgow Medical Journal*.

Free Hospital for the Cure of Malignant Diseases,

GREVILLE-STREET, HATTON GARDEN.

MALIGNANT CHOLERA.

THERE are two stages in this disease; the symptoms of both are as follow:

The First Stage.—A feeling of general weakness over the whole body; sickness with pain about the stomach; purging and twitching pains in the bowels; a clammy feeling in the mouth, and a desire to drink more than usually. These symptoms constitute the first stage of the disorder; and in some persons they will continue for several days, but in others they quickly run into the second stage.

The Second Stage.—This is known by the weakness becoming extreme; vomiting and purging of watery fluid greatly increased; extreme thirst; cramps in the hands, feet, and legs; coldness of all the limbs; cold breath; sunken eyes; dark blue appearance of the extremities; and no pulsation is perceptible at the wrist. In children the signs are vomiting, purging, great thirst, and general restlessness.

The disease during the first stage may always be cured; but if neglected and allowed to pass into the second stage, it is fatal in three out of four cases. At this hospital not one patient has been lost when admitted during the first stage of the complaint; and many have been saved

by great attention to medicine even in the second stage. The treatment is very simple, and the medicines can be procured at a very cheap rate.

Remedies during the first stage, for children up to four years old:

Calomel, five grains;

Ginger, five grains;

mixed together for a dose. This powder to be given immediately, mixed in a little treacle; and two hours after the powder give the following draught:

Powdered rhubarb, ten grains;

Castor oil, half an ounce;

mixed together, and given in half a cup of strong coffee.

Should the vomiting and purging continue, give two table spoonsful of soda water every half hour, and repeat the powder of calomel and ginger four hours after the draught.

From the age of four years to fourteen, give the following powder and draught after the same manner:

Calomel, nine grains;

Ginger, nine grains—mixed.

The draught:

Castor oil, three quarters of an ounce;

Tincture of rhubarb, two drachms;

Powdered rhubarb, eight grains—mixed.

From the age of fourteen and upwards, take the following powder and draught:

Calomel, 15 grains to 20;

Ginger, 15 grains to 20—mixed.

The draught:

Castor oil, and

Tincture of rhubarb, of each one ounce—mixed.

Small draughts of soda water to be taken by all, providing the vomiting continues; and, should the symptoms not abate, the powder and draught may be repeated four hours after the first dose. Strong beef tea, well seasoned with salt and pepper, may be taken during the progress of the disease; but the patient must strictly avoid drinking a quantity of any fluid whatsoever at this period. Providing these remedies fail in removing the disorder, and the second stage ensues,

the following plan must be rigidly observed, it being the only one yet known that has restored a single patient; it is the saline treatment suggested by Dr. Stevens :

For children up to the age of four years :

Common salt, one scruple ;
Carbonate of soda, six grains ;
Oxymuriate of potash, two grains
—mix, for one dose.

From four to fourteen years of age :

Common salt, one drachm ;
Carbonate of soda, ten grains ;
Oxymuriate of potash, three grains—mix.

For persons above the age of fourteen years :

Common salt, two drachms ;
Carbonate of soda, one scruple ;
Oxymuriate of potash, seven grains—mix.

The above powders to be given every quarter of an hour, dissolved in a small quantity of cold water. During this treatment, as much cold water or weak beef tea may be taken as the patients desire ; the more the better.

The above are the only remedies now used during the progress of the disorder in this hospital, with the addition of hot salt-water bathing ; and such has been the success, that I feel it my duty to advise the same to the inhabitants of the adjoining parishes, but more particularly to that of St. Martin's, Ludgate, it being that portion of the City Liberty, in Farringdon Without, which is appropriated to my charge by the City Board of Health ; and any person desiring for further information may receive it gratuitously any day at one o'clock, at this hospital ; or before ten o'clock in the morning, at my residence, No. 2, Thavies Inn, Holborn-hill.

WILLIAM MARSDEN, Surgeon.
Greville-street Free Hospital
for the Cure of Malignant Diseases.

July 16th, 1832.

N.B. Persons not able to pay for medicines will be furnished with them free, by applying as above directed.

Should any case occur, it is requested that notice be immediately sent to the surgeon, who will superintend the above plan of treatment.

SECRET REMEDY FOR INCIPIENT
CATARACT.

To the Editors of the London Medical and
Surgical Journal.

GENTLEMEN,

IN your Journal of the 30th ult. I perceive you have noticed the introduction of a secret remedy for the removal of incipient cataract, at the Royal Westminster Ophthalmic Hospital. I beg to enclose for your perusal a statement of a very interesting case of cataract, well known to Dr. Farre, which was removed in one eye by the use of this powerful and extraordinary preparation, the properties of which are by no means confined to this disease of the eye only, but extend their influence to all cases, where the pre-disposing cause is inflammation.

Many of the cases of cataract, placed under this treatment by Mr. Guthrie, are progressively improving, and I trust the opportunity now afforded me, of proving the extreme value and simplicity of this treatment over every other yet introduced, will no longer be opposed by professional prejudice. It has never been my wish to withhold from the public the knowledge of any good which circumstances may have given me the control over for the moment ; but I am certainly desirous in this case to have a matter, which I conceive to be of great public importance, clearly and satisfactorily authenticated, before it falls into the hands of many who would doubt its efficacy, and treat my statements of its general utility as chimerical, and founded in delusion. I must say too, that twenty years of close application, and *gratuitous* practice, merit some little return for the sacrifices made ; and I have no doubt, when I have once publicly established

my claim to remuneration, that the reward will not be withheld.

I remain, Gentlemen,

Your very obedient servant,
WILLIAM MARSHALL.

London State Lodge, Kew,
July 16, 1832.

(Copy.)

16, Newmarket Terrace,
Hackney, April 4, 1832.

DEAR SIR,

My mother offers her most sincere thanks for the bottle of drops, which have proved to her a most valuable blessing.

In 1822, when she applied to you, her sight was nearly gone, and Dr. Farre, without hesitation pronounced the case hopeless, that no application could effect a cure, but by couching, the cataract having formed over the right eye, and the other nearly in the same state. Your opinion was at the time, that there was no hope for the recovery of the right eye, when she commenced the application of the drops. She had not used it more than five or six weeks, when the sight of the left eye was restored as strong as twenty years back; nor did she require any change of glasses. She can thread a ten size needle, and work as well as at any period of her life, although she has no sight from the right eye. She has never taken any further advice, being perfectly assured she could never have any remedy equal to the drop. On application of the drop, the sensation is like soap in the eyes, but that is of very short duration. During the first two or three weeks, it is attended with great inflammation, but disappears as the eye gains strength. It caused a discharge of much water from the nose, particularly when first dropped into the eye. She never confines herself, nor abstains from working or reading during the time she uses it. My mother is now in her eighty-third year, and I am well assured she would have long since been blind, but from the use of it.

She desires me to add, that if it will be any satisfaction to Dr. Mackinnon to have any personal information, she will have much pleasure in testifying her gratitude for its utility, and the benefit she has experienced, and is fully convinced that it has only to be tried to insure its success.

I am truly,

Your obliged servant,
S. E. SKUTT.

My mother adds her signature to this, which clearly proves that her sight is good.

(Signed) SARAH SKUTT.

To William Marshall, Esq.
London State Lodge, Kew.

Hospital Report.

WELBECK DISPENSARY.

Case of Lepra.

SUSANNAH KITELEY, æt. 16, residing at 21, Spring-street, Portman-square, admitted under Dr. Sigmond, June 2nd, 1832. Is of a leuco-phlegmatic temperament; is affected with a scaly eruption, more especially about the knees; the scales drop off occasionally, leaving a red, unbroken surface beneath, but are soon renewed. It first appeared about three months ago on the knees, and has extended thence to the legs and feet, and latterly, within a fortnight, to the thighs, body, hands, and arms. She has been in service for two years. At her last place, where she remained for twelve months, was frequently fed on salt meat. After staying there eight or nine months, this eruption made its appearance.

Pulse moderate, about 76; bowels not very regular; tongue slightly furred; appetite very bad; catamenia not yet appeared.

Is apparently of a weakly habit, but from the mother's report appears to have suffered hitherto merely from sick headaches, to which she is very much subject.

- R *Submur. hydrarg. gr. ij.*
Pulv. rad. jalap. gr. xvij.
M. ft. pulv. j. omni mane sumend. mit-
te vj.
- R *Ung. hydrarg. nitr. dil. part. affect.*
applicand.

Is directed to live chiefly on vegetable diet.

5th. Bowels opened by the medicine.

- R *Decoct. ulmi cyath. vinos. ij. ter in die.*
Pilul. hydrarg. gr. v. nocte.

9th. There are fewer scales on the lower extremities, and the eruption is apparently lessened, but it is extending on the arms and hands; bowels confined.

- Hyd. submur. gr. iij.*
Pulv. jalap. ℥j. statim. Rep. decoct.
ulmi.

- R *Hydrarg. oxymer. gr. v.*
Liq. calcis. lb. j. part. affect. nocte et
mane lavand.

16th. The skin is clearing; the maculæ are less in number, and apparently not so irritable.—*Rep.*

July 17th. Has continued to employ the same medicines to the present date; the arms and hands are perfectly clear, and the legs very nearly so.

Another case, presenting appearances very similar to the preceding has been put under the same treatment, and with equal success.

THE

London Medical & Surgical Journal.

Saturday, July 28, 1832.

THE

CHOLERA AND THE GOVERNMENT.

WE have repeatedly argued that the prevailing cholera was one of those mysterious and epidemic diseases which, from time immemorial, have defied all human intervention, and, like all maladies of this class, will prevail, disappear, and reappear, in despite of all quarantine regulations.

We have often exposed the imbecility of the Central Board of Health, its blunders, its follies, its incompetency; and shewed that its advice to the Government would prove most injurious to the trade, commerce, and society of this country. Past and present events afford incontrovertible evidence of the truth of our statements. The disease is now as prevalent and fatal as ever; and yet the Government having discovered the real value of the infallible advice of the sages of Whitehall-place, cannot be induced either to enforce quarantine, or even to publish daily reports on the disease. Ample experience has fully evinced the baneful consequence of quarantine and exaggeration, and therefore it is considered wiser to abandon both. We have not at present any fabricated cases of cholera, but every endeavour is made to suppress just alarm in the minds of the public. While the profession are hourly witnessing the spreading of this fatal disease, a member of the Government assures the Parliament it has disappeared. Such is the pitiable state to which the country is reduced by the errors and follies of the Board of Health. Duped and misled by three or four unknown and insignificant persons, who were, forsooth, elevated above the heads of the medical profession in England, a good, a wise, and a most enlightened ministry has been placed in a position, which every right-minded man in the nation regrets. Behold the effect of corruption in the profession. Had the faculty been constituted as

it is in all other countries, neither the Government nor the Public would be misled by irresponsible advisers. Were there a College of Physicians properly constituted—were men of science, experience, and eminence, selected for the formation of a National Board of Health, the horrible notion of contagiousness of cholera would not have been advanced, and men of no note would not have outraged the public mind, closed the coffers of the treasury of this great country, terrified all classes, and pauperized the thousands dependant on commerce for daily bread. Another illustration of the necessity of medical reform was afforded by the bulletins regarding the disease of the late King, which were a gross insult to the Legislature and to the country, as forcibly observed by Lord Brougham. But what else could be expected from a band of medical jobbers, who hold the highest situations by interest, and not in consequence of scientific attainments. Let us look to France, where medical appointments are awarded on the grounds of scientific knowledge only. There we see the ablest and most renowned physicians and surgeons associate, and framing bulletins on cholera, which the whole nation receive with the fullest confidence, and which are diametrically opposite to our own. On the one side are the Andrals, Adelsons, Chaussiers, Chervins, Cloquêts, Cruveilhiers, Delpechs, Dupuytren, Larreys, Magendies, Orfila, Ratiers, Recamiers, Richerands, and Sansons; and on the other are the Russels, Pym, Barries,

Dauns, and M'Leans. In France, a love of science and of truth influenced the faculty; and also in this country, with the exceptions of the Central Board of Health and its satellites.

It is consoling to learn that the cholera has been on the decrease during the week, and is far less fatal than at the time of our last report. There is a good deal of diarrhœa at present, but this is speedily removed by ordinary measures. We are happy to perceive that the health of the metropolis is considerably benefited by the vigorous enforcement of the Cholera Act, which has already led to the abatement of divers nuisances. Several persons have been fined for vending unwholesome aliments, and carrying on trades injurious to health. This is a time when the sophisticators of the various foods and drinks should be punished. All the necessities of life are adulterated, and these must predispose the constitution to the invasion of the frightful malady now universally prevailing in this country. Deteriorated animal food is highly prejudicial to health, and hence the flesh and fish markets should be closely inspected. The weather has become more genial, and there is great reason to hope that malignant cholera will soon disappear.

THE ANATOMY BILL.

THE Act for facilitating, or rather impeding, the study of anatomy, has passed the upper branch of the Legislature; it may be fairly considered

totally unfit for the purpose intended by those who framed it. Its passing, however, is one step towards improvement, as its defects can be amended in a year or two. It is not the first piece of legislation that has been *burked* by the Lords.

EVIDENCE IN THE KINNEAR AND BAGSTER CAUSES.

IN reply to several correspondents, we state that our remarks on the above causes were general, and not personal, and were reiterated by our contemporaries.

MEDICAL FELLOWSHIPS.

DR. BRIGHT has been elected a Fellow of the Royal College of Physicians, and DR. DAVID BADHAM has obtained the Radcliffe Travelling Fellowship.

ROYAL COLLEGE OF PHYSICIANS.

THE Censors of this College are elected annually, as also the President, but the latter commands his satellites to re-elect him, contrary to law and to the rules of the College, thereby securing the considerable emoluments of the head of the institution for the time being.

ROYAL COLLEGE OF SURGEONS.

AT a quarterly meeting of the Council of the Royal College of Surgeons in London, held the 13th July, 1832, JOHN PAINTER VINCENT, Esq. was elected President, and GEORGE JAMES GUTHRIE, and ANTHONY WHITE, Esqrs. were elected Vice-Presidents of the College for the year ensuing.

DEATH OF MR. GIBSON,

AT ST. THOMAS'S HOSPITAL.

IT is with regret I forward to you an account of the death of Mr. Gibson, an industrious and intelligent member of the profession. He had been a pupil and dresser of St. Thomas's Hospital, and during the time of his pupilage had paid such attention to his studies, and to the patients that were placed under his care, as to gain for him the respect of the whole school, as well as the professors themselves. He was a young man of very regular habits; and upon the point of sailing for Calcutta; had been perfectly well up to Tuesday the 16th of July, when he was attacked with a slight diarrhoea; to this he did not pay much attention, or think much about. He went to dine the same day with Mr. Solly, the demonstrator of St. Thomas's, and during dinner he remarked that he felt very unwell. A short time afterwards he was attacked with violent vomiting and purging, felt the cramp about his stomach and legs, shewing every symptom of cholera. Dr. Roots, Mr. Ashwell, and another medical gentleman, were immediately sent for. Upon their arrival they found him in intense agony; every thing that they could suggest was tried without lessening his sufferings, and at seven o'clock the following day he fell a victim to this direful malady.—*From a Correspondent.*

July 24th, 1832.

THE LATE MR. JOHN WOOD,
OF BRIDGE-STREET, BLACKFRIARS.

IN a late Number we recorded the death that zealous and promising young surgeon, whose name stands at the head of these remarks. We have been informed, by the best authority, that he was in apparent good health the day previous to his attack, and that he became affected soon after his return from Bridewell, where he had been visiting persons labouring under cholera. In another Journal, noted for mendacity, sycophancy, and sub-

serviency to the renowned Board of Health, and any one else in power, we find a slight suppression of truth in the account of this gentleman's case. We find no mention made of his having taken a quantity of fruit pie on the preceding day; but this fact could not serve the doctrine of contagion.

Unprecedented Power of Steam.

WE insert the following exemplification of the value of steam, and exult that chemistry, a collateral and integral branch of medicine, is likely to accomplish such essential benefits to the public and the profession.

A Novelty in Posting.—Mr. Babbage, in his admirable little work on the Economy of Manufactures, has a new plan of conveying the mail. The immense revenue of the Post-office would afford means of speedier conveyance; the letter bags do not ordinarily weigh a hundred pounds, and are yet conveyed in bulky machines of some thousand times the weight, drawn by four horses, and delayed by passengers. The rail-road and the steam-carriage will probably soon relieve the speculator. Mr. Babbage proposes the erection of pillars along each line of road; these pillars are to be connected by inclined wires, or iron rods, along which the letters enclosed in cylinders, attached to the rods by rings, are to slide; persons stationed on these columns are to forward the cylinders from each point, after having extracted the contents belonging to their own station. In this manner it is calculated that a letter might be sent from pillar to post to the farthest limits of the land in the course of a very small portion of time; from London to York, probably in an hour or two. In the absence of pillars and in the interior districts, it is suggested that church steeples, properly selected, might answer the purpose; and in London the churches might be used for the circulation of

the twopenny post. This is certainly a most singular contrivance, and would be a droll use of church steeples: we fear that the clergy would not approve of the idea of turning the house of God into a twopenny post-office, though probably this is not the most solid objection to the scheme, and might be got over if, in other respects, it was found practicable. Deliveries would of course take place every quarter of an hour, and the next improvement would be that the twopenny postman should come in at the window instead of the door, like the dove letter-carrier in the Alhambra. The correspondence of both town and country would at least be carried on openly, and a very pretty spectacle it would be to see the cylinders sliding through the air in all directions, and to hear the whirr of the post a hundred yards over head like a bird in full flight. We may suggest that there would be no fear of the post or pillarmen (these new Simon Stilites of the philosopher) sleeping at their stations; for the comptroller-general might by means of the wires, communicate an electric shock every now and then by way of *avant courier* to the mail, or to enliven attention in case of any extraordinary despatch. In this manner also a reprimand might be conveyed in an instant; and, while the postmaster-general was sitting at his ease in the dome of St. Paul's, he might give a Welsh or a Scotch postmaster such a rap over the knuckles as he would not be likely soon to forget. One grand electrical machine would charge the wires along two or three hundred miles of road, and stand in the stead of a thousand chronometers. Epistolary language would necessarily suffer a revolution. In the neurological dictionary, instead of "drop you a line," we should insert "slide you a line;"—"have you put a letter into the post?" would be "did you steeple it?" and impatient correspondents would perhaps request the Duke of Richmond of the day to communicate their ardours by the next shock.—*New Monthly Magazine.*

Burial in England.—Honourable to the feelings of the nation as all must consider the procrastination of interment in England, it is not without its bad consequences. The effluvium of a dead body, diffusing itself in a house, where the minds and vital energy of its occupants are depressed by sorrow, and where the distressed relatives perhaps refuse necessary nutriment, may produce the worst effects. To parry these evils, and the still more awful errors of interring the dead alive, a consultation of competent persons might be appointed to examine the dead, as soon as possible after decease, and decide on the measures to be adopted. The civil law of France has made an enactment on this subject, which, if strictly adhered to, would go far to prevent these three evils—crime, burying the living by mistake, and keeping the dead to infect the living. So deeply and awfully have some people been impressed with the horrors of premature interment, that in one of the old imperial towns of Germany, a plan has been devised and adopted, as a security against this, as well as the other evils we have enumerated. Every person, after death, is carried to a well-ventilated room, constructed for that purpose, near the church; the corpse is warmly covered, and laid upon the table—the hands connected with strings, communicating with bells suspended in an adjacent room, where a watchman is constantly on duty. To insure his vigilance, he is compelled, every quarter of an hour, to advance the finger of a dial, which will only move at that interval of time. We relate this from recollection, which however is accurate in all essential particulars. Two persons were saved by this expedient.—*The Sources of Health by Belinaye.*

Extraordinary Power of the Human Ear.—The atmosphere is the grand medium by which sound is conveyed, though recent discoveries prove that other bodies conduct it with greater expedition, as in the instance of vi-

brating a tuning fork, to the stem of which is attached a packthread string; on the other end being wrapt round the little finger, and placed in the chamber of the ear, the sound will be audibly conveyed to the distance of two hundred yards, though not perceptible to any bystander. Miners, in boring for coal, can tell by the sound what substance they are penetrating; and a recent discovery is that of applying a listening-tube to the breast to detect the motions of the heart. The quickness which some persons possess in distinguishing the smaller sounds is very remarkable. A friend of the writer has declared that he could readily perceive the motion of a flea, when on his nightcap, by the sound emitted by the machinery of his leaping powers. However extraordinary this may appear, we find a similar statement is given in the ingenious work upon insects by Kirby and Spence, who say, "I know of no other insect, the tread of which is accompanied by sound, except indeed the flea, whose steps a lady assured me she always hears when it passes over her nightcap, and that it clacks as if it was walking in pattens!" If we can suppose the ear to be alive to such delicate vibrations, certainly there is nothing in the way of sound too difficult for it to achieve.—*Gardiner's Music of Nature.*

Physiology of the Voice.—*Wind Instruments.*—The concert orchestras are universally defective: the stringed instruments are overpowered by a crowd of flutes, clarionets, bassoons, trumpets, trombones, drums, and horns. If we except the Philharmonic band, there is not one in London that is properly composed. Singers have an aversion to the full orchestra, and to save the expense of duplicate parts, seldom give out more than one copy to each of the stringed instruments, thinking they shall be better heard by abridging them: they forget that in every case there is seldom or ever a sufficient number of violins to moderate and keep down

the force of the wind instruments. The writer noticed two circumstances in the Abbey band in the year 1791, worthy of remark: first, the great softness with which the songs were executed, although 377 stringed instruments accompanied the single voice, such was the lightness of the effect that they did not overpower or incommode it; second, from the great extent of the surface from which the sounds emanated, they were diffused through the atmosphere, so as completely to fill it. No single instrument was heard, but all were blended together in the softest showers of harmony.—*Gardiner's Music of Nature.*

Olive Oil.—The amount of duty paid on olive oil imported into the United Kingdom from 5th January, 1831, to April 5, 1832, was 76,962*l*. The quantity of this oil imported in that period was 2,296,629 gallons!

NECROLOGY.

AT Ballinrobe, of cholera, George Ross Watson, Esq., assistant surgeon 83rd regiment, aged 26 years.

At Limerick, Dr. Leahy died of cholera on 18th inst.

NOTICES TO CORRESPONDENTS.

P. J. W.—Our correspondent would feel much obliged by a fuller explanation of the facilities of admission into the American colleges. Perhaps Mr. Forbes Winslow would favour us with farther remarks on the subject.

Mr. George Rees will oblige us by forwarding the conclusion of his communication.

Mr. West's communication is under consideration.

Alpha.—The publication of the affair could only engender angry feelings. Our correspondent will perceive this on cooler reflection.

A. E.—Every work sent us is noticed—that alluded to has not reached us.

C.—There is an opinion abroad, that the Publishers of this Journal are partly responsible for the law expenses incurred in the

case of *Ramadge v. Ryan*. It is very true they are legally responsible, but being publishers only they received an indemnification from Dr. Ryan when the law proceedings commenced. It could not be expected that they would incur law expenses by inserting their names as publishers, and having no other advantage by the sale of the work than that possessed by Longman and Co., or any other medical bookseller who might vend it. If they were proprietors of the work, then they would share the losses as well as profits.

Dystocia.—We shall be obliged by the generous offer of our correspondent.

* * We shall give the Index and Title page of this volume in our next.

The members of the profession, who consider the damages awarded in the case of *Ramadge v. Ryan* excessive, have commenced a subscription to enable the defendant to apply for a new trial.

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